

**VISIONS OF SUSTAINABILITY:
An Overview of Radical Conceptions of Sustainability**

by

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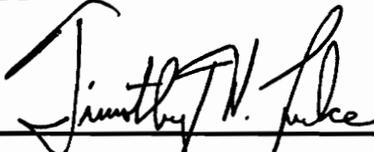
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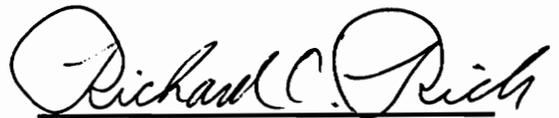
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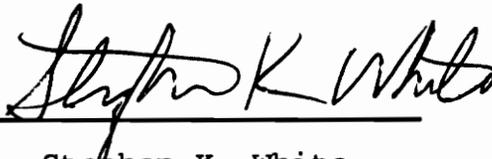
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ABSTRACT

The concept of sustainability has recently entered mainstream political, social and economic discourses. It has become, almost overnight, the politically correct, or ecologically correct, buzzword which may continue to define the environmental rhetoric of the 1990s. The concept of sustainability, as it currently exists in the conventional discourses, differs from its original radical conceptions. The purpose of this thesis is to examine the original conceptions of sustainability as presented within the steady state, simple living, and social ecology discourses. It is also the purpose of this thesis to examine possible explanations for the inconsistencies between the conventional and radical conceptions of sustainability and to suggest a possible future of the radical sustainability discourses.

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TABLE OF CONTENTS

ABSTRACT.....	ii
ACKNOWLEDGEMENTS.....	iii
TABLE OF CONTENTS.....	v
LIST OF TABLES.....	vii
CHAPTER ONE: Introduction.....	1
1.1 Overview.....	1
1.2 Defining Discourse.....	2
1.3 The Sustainability Discourses.....	3
1.4 Defining the Radical Discourses.....	11
1.5 Distinguishing Characteristics.....	13
1.6 The Radical Discourses.....	15
CHAPTER TWO: The Steady State.....	17
2.1 Overview.....	17
2.2 Growthmania.....	18
2.3 Misplaced Concreteness.....	21
2.4 Absolute Versus Relative Wants.....	22
2.5 Growth Versus Development.....	24
2.6 Biophysical Constraints.....	26
2.7 Ethicosocial Constraints.....	33
2.8 The Steady State Solution.....	38
2.9 Institutions of the Steady State.....	40
2.10 Transition to the Steady State.....	43

CHAPTER TWO:

2.11 Summary and Critique..... 45

CHAPTER THREE: Simple Living..... 53

3.1 Overview..... 53
3.2 Schumacher's Argument..... 55
3.3 'Science' of Economics..... 57
3.4 The Nature of Work..... 62
3.5 Technology..... 67
3.6 A New Lifestyle..... 72
3.7 The Transition..... 77
3.8 Summary and Critique..... 79

CHAPTER FOUR: Social Ecology..... 85

4.1 Overview..... 85
4.2 Social Ecology Vs. "Environmentalism"..... 87
4.3 Social Ecology..... 89
4.4 History of Domination..... 91
4.5 The "Remaking" of Society..... 97
4.6 Summary and Critique..... 105

CHAPTER FIVE: Conclusion..... 110

5.1 Overview..... 110
5.2 The Origins of Selective Incorporation..... 113
5.3 Concluding Remarks..... 120

BIBLIOGRAPHY..... 122
VITA..... 128

LIST OF TABLES

TABLE 5.1 Basic Distinctions Between Three Radical
Sustainability Discourses..... 111

Chapter One
INTRODUCTION

OVERVIEW

Students of political theory have recently turned to an examination, or reexamination, of the role that discursive practices play in defining, analyzing, discussing, and solving actual and/or perceived social, economic and political problems.¹ Discourse analysis has proven to be a useful critical tool for deconstructing diverse conceptions of political realities. In this thesis, I examine some of the environmental discourses, specifically the radical sustainability discourses, which have begun to permeate mainstream consciousness. This thesis includes the suggestion that the original conceptions of sustainability, as presented within the radical sustainability discourses, are not the same conceptions that are currently being discussed within the conventional discourses.

As the sustainability discourse has evolved and begun to enter the mainstream, the concepts presented are being interpreted and reinterpreted outside of the original radical contexts in which they first emerged. New conceptions of sustainability are being introduced which,

¹ See, for example, the recent work of Agger (1990), Haraway (1991) and Luke (1989).

although they use similar language, may be serving a different purpose. Many radicals fear that this occurrence evidences some form of cooption in which mainstream discourses are attempting to assimilate and "defuse" the radical conceptions of sustainability.

This thesis is an effort to examine this phenomenon by: 1) Defining and identifying the original radical sustainability discourses as presented within their original contexts; 2) Evaluating and analyzing the radical discourses as presented by the radicals; and, 3) Addressing the fear of linguistic cooption expressed by radicals like Murray Bookchin. In the conclusion of the thesis, I specifically address the "cooption" of selective aspects of the radical discourses. I suggest several possible explanations of the phenomenon each of which originates from some common facet of the radical sustainability discourses as a whole.

DEFINING DISCOURSE²

I refer to the concept of discourse throughout the thesis. Within the context of this thesis, when I employ the word "discourse," I am referring to a distinct

² My conceptualization of discourse is the product of class discussions and course readings, especially Agger (1990), Foucault (1979), and Haraway (1991). Any error or lack of clarity is, of course, entirely my own.

collection of mythic stories, terminological assumptions and language practices that help to define a common conceptual framework which is used by a group of actors to frame, discuss, and deal with economic, social or political problems. A discourse is, therefore, more than just a group of actors utilizing a specialized language who are engaged in a dialogue. It typically includes a common theoretical and philosophical lineage, a shared vision of reality, and often a similar political, social and economic agenda.

Discourses can, and do, overlap. Similar terminology, for example, is often shared by multiple discourses. Similar terminology can, however, also be used within different discourses to facilitate opposing objectives. I suggest, within the thesis, that the concept of sustainability is an example of such a phenomenon. It is increasingly evident that multiple interpretations of sustainability are being employed by different actors for different purposes.

THE SUSTAINABILITY DISCOURSES

Multiple interpretations of sustainability are possible because, like all political concepts, the definition of sustainability is highly dependent upon the context in which it is presented. The presentation of sustainability within the context of modern industrial society is more likely to

emphasize existing industrial practices than a conception of sustainability presented within an environmental context. Competing contextual definitions of sustainability have led to multiple sustainability discourses.

The multiple discourses have evolved from an emerging mainstream acceptance of the environmental concerns originally raised by ecologists during the early 1970s. The possible negative consequences of human participation, or intervention, in the natural environment may not be generally accepted truths, but these concerns have begun to affect political reality. As environmental concerns have entered mainstream political discourses, proposed political solutions have begun to emerge. The concept of sustainability is one such emerging solution.

Within the conventional political context of the modern industrial society, so-called sustainable solutions have included discussion and implementation of government rules, regulations, taxes, quotas, and fines designed to alleviate, or create the illusion of alleviating, some of the concerns of the most vocal ecologists. These solutions are the product of the conventional discourses in which contextually "radical" politicians, like Vice-President Al Gore³,

³ During the 1992 presidential campaign, George Bush, the incumbent Republican Presidential candidate, repeatedly portrayed Gore, the Democratic Vice-Presidential candidate, as a radical environmentalist because of some of the ideas

discuss sustainable solutions.

Conventional mainstream political definitions of sustainability, because they are defined within an industrial context, center around an emphasis on the management of natural resources so that human economic, social, and cultural needs can be met without destroying either the resources necessary to meet those needs or the biophysical life support systems which maintain human existence. Conventional interpretations of sustainability have entered the dominant political discourses due to increasing mainstream recognition of the possible limited availability of the Earth's natural resources, or, perhaps more accurately, due to increasing concerns about the possibly limited resource extraction capabilities of human technology. The conventional political and economic benefits of adopting a sustainability perspective is portrayed within the conventional context as a need to prevent the possible erosion of human economic potential due to the inefficient use of available natural resources. The

presented within Gore's 250 page environmental tract, Earth in the Balance. The book includes an outline of a five step global program to alleviate environmental degradation. The primary goal of the program, according to Gore, is "the establishment...of the social and political conditions most conducive to the emergence of sustainable societies" (307, emphasis added). Such language may make Gore appear "radical" within the context of conventional American politics, but he appears less radical within many environmental contexts.

conventional perspective also includes a recognition of the possible negative effects of human participation and/or intervention in the global eco-system, including potential loss of aesthetic value, the loss of species which may benefit humanity in the future, or even, the drastic possibility that harming the global environment may eventually disrupt humanity.

These conventional, or mainstream, interpretations of sustainability are contested by proponents of the more radical sustainability discourses. The radical interpretations originate from within a different political, economic, and social context than the conventional interpretations of sustainability. The radical contexts contain a very critical interpretation of the current orientation of modern society. According to the radicals, sustainability was originally conceived as part of a critique of modern industrial society and can only be fully understood within such a context. The radicals charge that the conventional interpretations of sustainability are a form of "shrewd linguistic parasitism," to borrow Bookchin's (1980: 87) descriptive phrase, designed to quell the radical criticisms inherent within their original development of the sustainability discourses. The language of sustainability, it is feared, is being coopted by those it was originally designed to critique. The radicals suggest that there is an

attempt to water down their critical interpretation of sustainability so that it can be assimilated into the existing mainstream political/economic/social contexts without acknowledging the validity of the radical critiques.

For example, politicians, mainstream environmentalists, World Bank economists, farmers, Madison Avenue advertising agencies, foresters, and even corporate executives all operate within the conventional context and they have begun to adopt and apply, if only symbolically, the language of sustainability⁴. This is problematical from the radical sustainability perspective because the concept of sustainability has been removed from its original radical context and is being reinterpreted by numerous additional actors with competing agendas within the conventional context.

The word "sustainable," as used within the modern industrial context, has been adopted by a variety of industries to address perceived environmental problems. Sustainable fishing, sustainable forestry, sustainable

⁴ Evidence of the increasing use of the language of sustainability includes television and print advertising by Phillips Petroleum, which is currently describing its purpose as "helping to sustain our future." The World Bank and other international development agencies have begun to discuss and implement plans designed to promote "sustainable development" (Rees). The United States Forest Service has also just announced that it is adopting a "sustainable forestry approach" (Washington Post, April 12, 1993, A12).

agriculture, sustainable resource use, and sustainable waste management provide but a few examples of the linguistic applications of the sustainability concept. Perceived environmental problems like over fishing, clear cutting, soil erosion, resource depletion, and pollution are effectively eliminated by adopting, at the very least, the language of sustainability. The use of the concept of sustainability has even begun to percolate into the consciousness of the general public. Sustainability has become, almost overnight, the politically correct, or ecologically correct, buzzword which may well continue to define the environmental rhetoric of the 1990s.

Radical interpretations of this phenomenon suggest, however, that only the linguistic tools of sustainability have been adopted. The ecological and social concerns raised within the radical sustainability discourses remain unaddressed while the language of their solutions has been coopted. Gore's use of the term sustainable, without providing any contextual definition, may be the most recent and most publicly discussed example of this practice.

Radicals suggest that the many different uses of the word "sustainable" have resulted in multiple, and often conflicting, interpretations of the concept. Radical sustainability advocates suggest that conventional conceptions of sustainability portrayed within the modern

industrial context tend to focus primarily on maintaining the productive capabilities of modern industrial society and the excesses of a consumer-oriented market economy. According to these critics, sustainability, within the conventional context, is simply another attempt to increase production and profitability by requiring additional increases in efficiency. Conventional interpretations of sustainability encourage increasing efficiency by introducing the possibility that resources are not immediately or infinitely available. Faced with the possibility of limits to resource availability and the desire to maintain the productive and profit-making capabilities of an industry, producers seek to maximize the use of those resources by increasing efficiency.

The concept of sustainability, as originally presented by the radicals, is not compatible with a definition limited to efficiency. According to the radicals, the conventional discourses of sustainability provide producers with the linguistic tools to address the increasing environmental concerns of the consumer without actually altering, to any significant degree, their unsustainable practices. The perceived environmental consciousness of the consumer and the efficiency, productivity, and profitability goals of the producer provide the context for the conventional, market-oriented conceptions of sustainability. Conventional

discourses of sustainability, within the context of modern industrial society, suggest that the market, possibly including limited government market adjustments, provides a sufficient means of addressing environmental concerns.⁵

Proponents of the radical sustainability discourses suggest that the environmental problems can not be corrected by the market or by adjustments to the market because the problems originate not from the market, but from modern market-oriented societies. Sustainability, therefore, can only be truly understood outside the context of modern industrial society. Sustainability, as presented by the radical critics, is a solution to their critique of what they perceive as the excessiveness of materialistically oriented destruction, production, and consumption patterns within Western industrial cultures. These critics suggest that the current emphasis on materially based economic growth may be physically or socially unsustainable and, without drastic changes to the structure and organization of modern society, may eventually lead to ecological or sociological collapse.

⁵ Two well known advocates of the conventional sustainability approach, which suggests that the market, with possible minor adjustments, provides a sufficient guarantee of sustainability, are Herman Kahn and Julian Simon. See, for example, Kahn's The Coming Boom (1982) and Simon's Effort, Opportunity, & Wealth (1987).

DEFINING THE RADICAL DISCOURSES

The radical sustainability discourses are easily distinguished from the conventional discourses by examining the alternative contexts in which the concepts are presented. The radical conceptions of sustainability contextualize understandings of sustainability on a global scale, unlike the conventional interpretations which, according to the radical critics, place notions of sustainability in a context designed to further advance the self-serving interests of an elite segment of the population, namely Western producers/consumers. The radicals further suggest that while the benefits of conventional sustainability advance the interests of the elite, the costs are imposed upon a powerless majority. The radical sustainability discourses propose conceptions of sustainability designed to equally benefit all members of the global community.

The radical interpretations of sustainability can also be characterized by their use of broader contextual time frames. Long-term sustainable solutions are discussed by the radicals with reference to centuries rather than decades which are referred to within conventional interpretations. The effectiveness of conventional interpretations, according to the radicals, is limited by a very narrow conception of the future. Conventional solutions are rarely examined

beyond a period of twenty-five to thirty years. Radical sustainable solutions have been proposed which are designed to remain viable for hundreds of years.

Radical sustainability discourses also present a broader conceptualization of the problems of modern society. While conventional discourses address problematic aspects of industrial society, the radical discourses often suggest that modern industrial/consumer society is the problem. According to the radicals, the extent of the sustainability problems can only be examined outside of the conventional societal context because the problem ultimately includes society itself.

Finally, the solutions proposed within the radical context are much more fundamental than conventional solutions. Conventional solutions tend to emphasize correcting aspects of industrial society, while radical sustainable solutions advocate changing the industrial system. Conventional solutions attempt to modify or alleviate the problems by concentrating on "market flaws," or suggesting that future improvements in technology will eliminate the problems. The radical sustainability solutions tend to demand changes on a broader societal level rather than advocating "superficial" modifications of the market economy.

DISTINGUISHING CHARACTERISTICS

The various positions within the radical discourses can be distinguished from one another, and from the conventional discourses, by examining the following five dimensions:

- 1) The implicit normative assumptions about the current state of society;
- 2) The empirical arguments supporting a need for sustainability;
- 3) An explanation of what needs sustaining, by whom, and who it is designed to benefit;
- 4) The degree of social changes, if any, required for sustainability; and,
- 5) The economic, political, or social mechanisms of transition to the proposed sustainable solutions.

The first of these dimensions provides important insight into which normative issues are being addressed by a particular sustainability discourse. A necessary assumption of every advocate of sustainable solutions is the presence of some aspect of society that is potentially unsustainable in its current form. It is also necessary to assume that the problem can be alleviated by implementing a sustainable solution. Each of the radical sustainability discourses begins with different conceptions of the problems that can be addressed within the discourse. These problems range from social/market flaws which contribute to resource

depletion and/or pollution to radical critiques of the supposedly inherent forms of domination present in modern industrial society.

Second, the sustainability discourses can be categorized by their reliance on or dismissal of "empirical data." Empirical data concerning the current state of the environment remains highly contestable. The importance of the numerous available indicators is also debatable. The indicators and data revealed, concealed, or disputed by advocates of sustainability provide further insight into the types of normative issues being addressed.

Third, each of the discourses uniquely addresses what is currently unsustainable and what, therefore, needs sustaining. A sustainable solution may involve maintaining any of a number of current practices, resources, or environmental features. One might hypothetically choose to sustain the Western consumer culture, the privileges of the elite, the domination of minorities, the exploitation of the working class, the petroleum industry, the "natural" environment, biodiversity, natural resources, or any of a number of specific species. What is sustained ultimately determines who will benefit and who will assume the burden of responsibility. The breadth of what needs sustaining and the party responsible for bearing the costs present an important distinguishing characteristic of the radical

discourses.

Fourth, any discussion of sustainability involves an element of change. Some of the sustainability discourses require radical restructuring of the entire social, economic, and political structures. Some require less drastic changes designed to prevent projected hazards related to current practices from becoming a reality. The degree of social changes required for the implementation of the proposed sustainable solutions is another key characteristic of the radical sustainability discourses.

The mechanism of transition to a sustainable solution is the final distinguishing characteristic. Several transition mechanisms have been identified within the discourses. Change may be implemented via an authoritarian regime, by violent revolution, by necessity, through the gradual adoption of sustainable policies and practices, or via a sudden peaceful transition once some 'critical mass' for change has been achieved. The transition mechanism is an especially crucial characteristic when discussing the radical sustainability discourses because it proves to be the weakest component of the radical critique.

THE RADICAL DISCOURSES

I have identified three primary radical sustainability discourses utilizing the points of distinction identified

above. These include:

- 1) **Steady-State** -- as outlined by Herman Daly (Chapter Two);
- 2) **Simple Living** -- as elaborated by people like E. F. Schumacher and Duane Elgin (Chapter Three); and,
- 3) **Social Ecology** -- advocated, most notably, by Murray Bookchin (Chapter Four).

These three discourses are not intended to be a comprehensive listing of all possible radical sustainability discourses. There are as many discourses, definitions, and conceptualizations of radical sustainability, and sustainability in general, as there are ecologists, politicians, and industry executives. Likewise, the authors mentioned in context of each of the three discourses are not intended to be a comprehensive listing of the authors and activists that have contributed to the development of each discourse. These three discourses and the representatives I have chosen depict, rather broadly, the radical subdivisions of the even broader sustainability discourses.

Each of these three radical sustainability discourses is presented within this thesis as completely, concisely and coherently as possible. They are presented as their original authors presented them, utilizing their unique perspectives and language. Flaws, discrepancies or inadequacies are addressed at the end of each chapter.

Chapter Two
THE STEADY STATE

"Note...the blind assertion that Malthus was wrong, when in fact his predictions have been painfully verified by the majority of [hu]mankind."

- Herman Daly (1977)

"Malthus was only wrong about the date."

- William Ophuls (1992)

OVERVIEW

Herman Daly, drawing inspiration from the work of Thomas Malthus, Frederick Soddy, and John Stuart Mill, introduced the concept of the Steady State to the radical sustainability discourse. Daly framed the steady state discourse within the context of what he perceives as the primary problems of the current dominant economic system. These problems include uncontrolled population growth, damaging economic growth, and excessive economic inequality.

From this context, Daly attacks the modern economic emphasis on continual growth. The concept of infinite material growth, according to Daly, exists only as a mathematical possibility and assumes both infinite resources and infinite wants. Daly believes neither of these assumptions exist in reality. While infinite growth may be a theoretical possibility, he suggests that reality presents

both biophysical and ethical/social or -- adopting Daly's terminology -- "ethicosocial" constraints to growth.

Daly ultimately concludes that society must abandon its unsustainable emphasis on continuous economic growth in favor of a more sustainable solution. His radical conception of sustainability takes the form of the Steady State in which institutions enforce "birth quotas, depletion quotas and distributive limits" (1974: 20).

GROWTHMANIA

Daly provided society's emphasis on continual economic growth at any cost with "the insufficiently pejorative label of 'growthmania'" (1974: 7). According to Daly, growthmania is a mindset which proposes that there "is no such thing as enough [and] that cannot conceive of too much of a good thing" (1973a: 150). Growthmania means "literally not counting the costs of growth" (1973a: 150). An example of such a mentality, often cited by Daly, is a statement made by the 1971 President's Council of Economic Advisors. They stated, "If it is agreed that economic output is a good thing it follows by definition that there is not enough of it" (1980b: 150). The council apparently made no consideration of the possible negative effects of continual economic growth. Daly suggests that the same type of illogical extrapolation could lead one to conclude, "If an

inch of rain is a good thing then...fifty inches is better" (1980b: 87).

The pervasiveness of growthmania is also evident, according to Daly, in the overemphasis economists and politicians place on the use of Gross National Product (GNP) as an economic indicator of well-being¹. According to the "growthmaniacs," any increase in GNP is beneficial (Daly, 1974). It is problematically assumed that an increase in GNP indicates that the productivity of the economy has increased which translates into greater employment, the greater availability of goods and services, and therefore, a more general increase in the economic well-being of the society.

The use of GNP as an indicator of well-being has, within the last 25 years, come under attack. Jonathan Porritt, for example, has criticized the use of GNP

for the simple reason that as a measure of progress, it's more or less useless. GNP measures the lot, all goods and services produced in the money economy. Many of these goods and services are not beneficial to people, but rather a measure of just how much is going wrong; increased spending on crime, on pollution, on the many human casualties of our society, increased spending because of waste or planned obsolescence, increased spending because

¹ GNP is defined by economists as "the total value of all final goods and services produced in the economy during a given year" (McEachern, 123).

of growing bureaucracies: it's all counted (cited in Shiva, 6-7).

The inclusive nature of GNP, the fact that it includes all economic growth regardless of its positive or negative social or environmental consequences, led Daly to refer to it as an "Alice-in-Wonderland accounting system" (1973a: 150). He accuses economists of relying on an "inadequate definition of GNP" (1973b: 24). The use of GNP as an economic indicator actually allows one to conclude that pollution is profitable because the costs of cleaning up pollution increase GNP while the costs of producing pollution do nothing to decrease GNP. Any increase in GNP, according to Daly, "creates the illusion of becoming better off, when in actuality we are becoming worse off" (1973b: 150-151). From Daly's perspective, "the problem with GNP is that a large part of it is cost masquerading as benefit" (1980b: 88).

GNP has become the standard measurement for the growth and development of a state. However, GNP is only a measure of the outputs of an economic system. It does not measure the costs of producing those outputs. As Paul and Anne Ehrlich have noted:

More important than what GNP is, however, is what it is not. It is not a measure of the degree of freedom of the people of a nation. It is not a measure of the health of a population. It is not a measure of the state of depletion

of natural resources. It is not a measure of the stability of the environmental systems upon which life depends. It is not a measure of security from the threat of war. It is not, in sum, a comprehensive measure of the quality of life (1971: 48, emphasis in original).

GNP was at one point in time, according to Daly, a useful measure of welfare. At one point, an increase in GNP corresponded to "more food, clothing, shelter, basic education, and security" (1973b: 11). However, an increase in GNP in today's society represents "more electric toothbrushes, yet another brand of cigarettes, more tension and insecurity, and more force-feeding through more advertising" (11). According to Daly, modern society is continuing to pursue, with the encouragement of the modern economist, the producers, and the multi-million dollar advertising industry, the impossible dream of infinite growth. Modern society is still suffering from a severe bout of "growthmania."

MISPLACED CONCRETENESS

Daly accuses economists who advocate continual economic growth of committing the fallacy of misplaced concreteness. To commit the fallacy of misplaced concreteness means "to confuse the model with the real world, to mistake the map for the territory" (1980b: 79). According to Daly, "[t]his

fallacy evidently clings to economics with the tenacity of original sin" (82).

Daly believes that economists have confused the assumptions of their economic models with reality. Modern economic theory operates on a number of assumptions. Two of the most important assumptions according to Daly are: (1) the assumption of infinite consumer wants and desires, and; (2) the assumption that growth is equivalent to development. These assumptions have evolved into a pro-growth discourse, a discourse which Daly believes has provided the problematic perspective adopted by modern industrial society and which has led to the creation of many of the ecological problems.

ABSOLUTE VERSUS RELATIVE WANTS

One of the primary assumptions of modern economic theory is the belief in infinite consumer wants and desires. Modern economists assume that the consumer's appetite for material possessions and services is infinite. This assumption is an essential component of the pro-growth discourse. Daly disputes the basis of this assumption by reiterating Keynes' (1963) distinction between absolute and relative wants.

Absolute wants, according to Keynes and Daly, are wants that are felt independent of any socially constructed desire. Absolute wants include such basic needs as an

adequate diet, protective clothing, and simple shelter. Absolute wants, as such, are satiable; every individual's stomach has a limited capacity for food (granted, some more than others); an individual can only wear one set of clothes at a time, and; one can only be in one place at a time. Additional desires, including the desires for exotic food, fashionable clothing, or lavishly furnished, spacious homes, fall into the realm of relative wants.

While absolute wants are satiable, according to Daly, relative wants may well prove to be insatiable. Relative wants are relative in the sense that an individual only desires them if their possession will make them feel superior to other consumers. For example, a BMW and a bicycle both serve the same basic need for transportation. However, the BMW is valued more highly in a relative sense for the prestige associated with BMW ownership. Relative wants are valued more for their status than their utility.²

Daly suggests that modern economic theory has ignored the distinction between absolute and relative wants and has erroneously assumed that all desires are insatiable. Paraphrasing Daly, Kern suggests that, "[t]he problem with economics is that all types of wants are accorded the

² John Stuart Mill, contemplating relative wants, suggested that "Men do not desire to be rich, but to be richer than other men" (cited by Daly, 1987: 331).

insatiability of relative wants but are invested with the ethical quality of absolute wants" (1983: 503). According to Daly (1977), modern economists have made this assumption in an attempt to avoid introducing value judgements into economic theory. It is Daly's view that economists want economics to be a "true" science which means that they must adopt a value-neutral stance. This allows economists to avoid making ethical judgements concerning the true value of a commodity. Ethical judgements and value assessments have been "reduced to personal tastes" (1980b: 83).

All wants, according to Daly, are not insatiable, contrary to the assumptions of many modern economic theorists. The assumption that they are may be advantageous for modern economic theory, but it does not accurately reflect the real world. It is, quite simply, according to Daly, an example of the fallacy of misplaced concreteness.

GROWTH VERSUS DEVELOPMENT

A second example, also identified by Daly, of modern economic theorists unintentionally embracing the fallacy of misplaced concreteness is the assumption that growth is equivalent to development. Growth, according to Daly, is the quantitative increase in the scale of the economy. Development represents a qualitative improvement in the non-physical characteristics of the society. Growth and

development are related, but distinct concepts (Daly, 1987).

The distinction can be difficult to clarify because at one point in the history of the industrialized world, growth and development were practically synonymous. Development required growth and most growth led to development. According to Daly, this is no longer true in the industrialized segments of the world. The distinction remains, however, less clear in some of the less-industrialized portions of the world (Daly, 1987).

Despite the historical difficulty with the distinction, Daly suggests that the difference does exist. There is a difference between quantitative growth and qualitative development. The assumption that growth always implies development ignores, according to Daly, the obvious negative consequences of some types of growth. From an economic standpoint, increasing the number of automobiles produced is a clear example of growth. However, it does not necessarily represent development if automobiles are purchased by individuals who would have ordinarily utilized public transportation or if the additional pollution from the increased number of internal combustion engines outweighs the gains in transportation convenience. Daly notes that "[i]t is important to remember that 'growth' is not synonymous with 'betterment'" (1977: 99).

Daly believes that modern economists and industrial

civilizations are confusing growth with development. The confusion has prevented many from understanding that growth is not as important for development as was once believed (1987: 333). Economists should not "conceive of economic growth as a permanent normal process of a healthy economy," according to Daly, but "as a temporary passage from one steady state to another" (1973b: 2). Daly suggests that "[i]n the long run, stability is the norm and growth the aberration" (1977: 18).

Daly argues that a true need for human development has been confused with the constructed needs for economic and material growth. He suggests that infinite development is not only possible, but required, while infinite growth has always been impossible and should no longer be perceived as necessary or desirable. According to Daly (1987), economic and material growth are not only no longer needed, but are severely limited by biophysical and ethicosocial constraints.

BIOPHYSICAL CONSTRAINTS

Daly, along with many other ecologists, argues that there are biophysical limits to growth. Humanity, despite increasingly amazing and complex technology, is still dependent upon resources provided by the earth. This continued dependency on the potentially limited products of

the earth allows the possible existence of biophysical limits to growth. Daly (1987) has identified three interrelated factors within the sustainability discourses which suggest such biophysical limits exist; (1) finitude; (2) entropy, and; (3) complex ecological interdependence.

The most frequently discussed of these biophysical limits is the notion of resource finitude. Finitude suggests, quite simply, that there are definite physical limits to the continued availability of resources required by materially based economic growth. The reemergence of such a Malthusian concept began with the publication of Limits to Growth in 1972. Meadows, et al., discussed the increasingly rapid depletion of the limited stock of necessary natural resources. Oil, natural gas, coal, precious minerals, fertile land, timber, clean air, and water are all threatened with total depletion according to the projections of Meadows. These limits, if accurate, obviously place a damper on the likelihood of continual material growth.

According to Daly, the problems due to the increasing resource depletion rate are amplified by similar increases in population growth. Paul and Anne Ehrlich (1971) have discussed how increasing population trends, combined with increasing resource depletion trends, suggest that materially based economic growth may shortly become a thing

of the past. Daly suggests that "a U.S.-style high-mass consumption, growth dominated economy for a world of 4 billion people is impossible" (1977: 6).³ The type of economic growth currently enjoyed by the industrialized nations may continue in the near future based on an increasing disparity between wealthy and impoverished nations, but even that growth path will soon succumb to absolute resource scarcity.

Daly (1977, 1974) makes a distinction between relative and absolute scarcity. Relative, or Ricardian, scarcity represents a decline in the availability, or a rapid increase in the extraction cost, of the necessary resources. During the OPEC oil crises in the late 1970s, oil was relatively scarce. The overall stock of oil did not decrease significantly during that short time period, but the supply of oil was sharply curtailed and consumer prices increased.

Absolute, or Malthusian, scarcity represents total depletion of the stock of a resource (Daly, 1977, 1974). Absolute scarcity for many resources remains a hypothetical projection. However, absolute scarcity, in the form of extinction in the case of biological species, is evident in the stocks of dinosaurs, passenger pigeons, and dodo birds.

³ The world's population is currently estimated to exceed 5.2 billion people (Ophuls, 1992: 43).

According to Daly, the stocks of precious natural resources are similarly threatened and non-biological resources, unlike the previous examples, are not capable of reproducing.

Daly (1973b) suggests that we abandon the flaws inherent within the pro-growth discourses and adopt a perspective presented within his interpretation of the sustainability discourses. He suggests a perspective first elaborated by Kenneth Boulding. Boulding (1966) suggested that the earth is currently inaccurately perceived as an 'open' system which has led to the emergence of a "cowboy economy." The 'cowboy economy' is based on the notion that the frontiers are limitless, that natural resources are forever abundant and that infinite growth is possible. Infinite growth, within the 'cowboy' discourse, is not only possible, it is actively encouraged.

Boulding suggested that the 'cowboy' mentality is ultimately destructive. Recent recognition of the possible limited supply of the earth's resources led Boulding to conclude that the earth is not an 'open' system, but a 'closed' one. The earth, Boulding suggested, has a "carrying capacity" (1966) which limits growth. Infinite growth is not possible because the 'carrying capacity' of the earth limits the size of the total supportable species population due to the limited availability of resources.

The earth is not, according to Boulding, an 'open' system.

Boulding suggested that the earth can be more accurately described as a 'closed' system. It should, therefore, be viewed as "a single spaceship, without unlimited reservoirs of anything, either for extraction or pollution" (127). Frontiers are not limitless, instead the frontier is limited to the known supply of limited resources. Thus, the "spaceman" discourse acknowledges the limited nature of the earth's natural resources and adopts an economic system less oriented around continuous material economic growth.

Daly fully supports the adoption of the "spaceman" economic perspective (1973b). He suggests that "[t]here is no more 'frontier,' no more empty continents, no more infinite sources and sinks" (1987: 327). Daly has repeatedly stated that "[i]t is simply a brute fact that there is such a thing as absolute scarcity..." (1974: 18).

Finitude is only one of the three biophysical constraints to growth identified by Daly. The second constraint centers around the laws of thermodynamics. Economists, according to Daly (1987), have long recognized the economic limits imposed by the first law of thermodynamics, 'matter can be neither created nor destroyed.' (Economists may not agree that there are finite limits to the required material resources, but they do agree

that humanity is not capable of creating matter, just transforming it.) However, Daly suggests that economists have ignored the limits imposed by the second law of thermodynamics, also known as the law of increasing entropy.

The second law of thermodynamics suggests that some of the capacity for rearranging matter into economically useful products is consumed in the process of production. The law of entropy states that no mechanical process can be 100% efficient. Some matter-energy is lost as heat, or pollution, in the process of converting matter into more economically useful products. This loss occurs during the extraction, assembly, consumption, destruction, and recycling phases of the production process.

The constraints imposed by the second law of thermodynamics provide an additional limit on exponential material growth. According to Daly (1987), not only are there physical quantitative limits to the stock of material resources, but the laws of thermodynamics prevent the conversion of the entire stock of resources into useful economic products.

The third and final biophysical constraint identified by Daly is the complex ecological interdependence of each species residing on the planet. There are, Daly believes, certain immeasurable "life support services rendered to the economy by other species and by natural biogeochemical

cycles" (1987: 324-325). For example, one hypothesis, not directly addressed by Daly, which has gained recent recognition is the role of the tropical rainforests in controlling global climate patterns. Destruction of an ecosystem like the rainforests, directly by cutting down plant life, or indirectly by extinguishing animal species which contribute to the health of plant life, may have dire consequences on the agriculture, and therefore the economies, of the industrialized world. (For further discussion and additional examples, see Lovelock, 1988.)

According to Daly (1987), the complex interdependence of each plant and animal species, all of which derive some direct or indirect benefit from the earth's mineral deposits, presents a final biophysical limit to continuous economic growth. Utilizing rainforest hardwood for economic profit may contribute to GNP, but it may also contribute to the ultimate destruction of not only the industrial economy, but the industrial society.

Daly suggests that "economics has become detached from its own biophysical foundations" (1973b: 33). "The idea that biophysical limits to growth are near as well as real," according to Daly, "is not just the fabrication of 'doomsayers'" (1987: 327). There are, he believes, very real biophysical constraints based on the principles of finitude, entropy, and the complex ecological

interdependence of each species.

ETHICOSOCIAL CONSTRAINTS

Daly not only enumerated biophysical constraints to continual economic growth, but suggested the existence of ethical and social constraints as well. These ethicosocial limits to growth include (1987):

- (1) a concern for the costs imposed upon future generations;
- (2) a recognition of the inherent value of sub-human⁴ species and a desire to limit the erosion of their habitats and prevent their extinction;
- (3) the existence of self-canceling growth effects upon human welfare, and;
- (4) the potentially negative effects on the necessary moral standards required by human civilization.

Daly believes all actions taken in the present should be evaluated based upon their effects on future generations. He asks, "[S]hould the extravagant luxuries of the present take precedence over the basic needs of the future?" Daly responds negatively and proceeds to suggest that "at some point the claim of the future for petroleum to fashion plows

⁴ Daly adopts what others might deride as an anthropocentric bias when referencing non-human species. Current politically correct, or environmentally correct, use tends to favor the phrase "non-human" rather than "sub-human." The use of "sub-human" within this chapter is an attempt to retain the perspective as it is presented by Daly.

to grow food outweighs the claim of the present to use that petroleum to fly a few people across the Atlantic a few hours faster in a Concorde airplane" (1987: 328).

Attempts to resolve this dilemma by determining the future monetary value of present natural resources is, according to Jose Lutzenberger, Brazil's former minister of the environment, "like auctioning the Mona Lisa to a roomful of shoeshine boys: many would-be bidders, like those in future generations, are not able to bid" (cited in Gore, 1992:120). The members of the current generation have no comprehension of the value that future generations may place on these goods. The answer, according to Daly, can not be found in the economic realm, but in the moral. Attempts at pseudo-value-neutral solutions will not suffice. It is the current generation's moral responsibility to conserve the resources currently available rather than squandering them on luxuries (1977).

Daly believes that a second ethicosocial constraint of economic growth emerges from a necessary moral respect for the "intrinsic value of other ["sub-human"] species" (1987: 330). Humans are not the sole inhabitants on the planet and should not treat the global environment as if they were. Humanity should, according to Daly, respect other species and their habitats for the unique contributions they make in maintaining the global ecological balance.

Other species do not, according to Daly, exist for the sole benefit of humanity. They do not exist solely for their beauty, a purely homocentric concept, or for their potential economic or material value. They may not be as important, in Daly's opinion, as humanity, but they are a necessary and important part of the planet's eco-system. The extinction of any gene pool, plant or animal, "represents a loss to all future generations" (1987: 331), both human and sub-human and represents a threat to the existence of "all future generations," both human and sub-human.

A third ethicosocial limit to material growth identified by Daly is the existence of several self-canceling growth effects upon human welfare. Daly suggests that all of the current industrialized world's economic growth is focused on satisfying ever increasing relative wants. These wants are created in an attempt to gain material, and therefore social, superiority over one's fellow citizens. Concern for one's fellow citizens has been practically obliterated by greed (1987).

There is a mistaken belief, according to Daly, that happiness can be materially obtained. Happiness can be increased, it is believed, by increasing the quantity of one's material possessions. The attempt to buy more goods requires one to work more. Working more creates even more

goods now available for purchase, which can be bought only by working more. The cycle is endless and Daly believes that the only result is a self-canceling effect which results in an overall reduction in the amount of time available for true non-material human happiness (1987).

Economic growth, according to Daly, can not provide happiness because "happiness, at least at the current margin in rich countries, is a function of relative income, not absolute income" (1987: 331). Relative wants are insatiable and therefore can not be satisfied by economic growth. Attempts to satisfy these inherently insatiable wants for the purpose of obtaining ultimate bliss may be contributing to further economic growth, but they are also actively decreasing happiness. The decrease in happiness which occurs by seeking happiness via material consumption creates another self-canceling effect of growth. Daly suggests that "[t]he implication of these self-canceling effects is that growth is less important for human welfare than we have heretofore thought" (1987: 333).

The final ethicosocial constraint to economic growth identified by Daly is the possible existence of negative effects on the moral foundations of human society. Daly suggests that the pursuit of relative wants in the guise of 'need' "leads to a weakening of the moral distinctions between luxury and necessity" (1987: 335). The systematic

obstruction of this distinction allows economic growth to continue by equating an individual's 'need' for a 50 inch, stereo-surround sound equipped, color television set with another individual's 'need' for simple, affordable shelter. Purely economic profits might increase more for each television sold in this scenario, but, according to Daly's analysis, the moral worth of the society decreases immeasurably.

According to Daly, a society can not exist without an underlying moral foundation. The amoral approach encouraged by current economic growth models, if it is allowed to continue, will ultimately destroy the foundation of society. In the process, it may also destroy society. The need to prevent this occurrence, by preventing the erosion of societies' moral foundations, presents the final ethicosocial constraint to growth (1987).

Daly hopes that the combined biophysical and ethicosocial limits to growth destroy the founding assumptions of the growth economy. He believes that the pro-growth discourses are only capable of generating and encouraging unsustainable practices. Daly suggests that the perspective provided by a sustainable discourse must be adopted. He acknowledges, however, that "[i]t is not enough simply to attack the pro-growth orthodoxy; we must have an alternate vision" (1977: x), a vision developed within the

context of a sustainable discourse.

THE STEADY-STATE SOLUTION

Daly recognizes that many economists reject his criticisms of the pro-growth economic mentality by contesting his projections of absolute scarcity and the importance of his distinction between absolute and relative wants. However, Daly continues to assert that "[i]t is a brute fact...that there is such a thing as absolute scarcity, and there is such a thing as purely relative and trivial wants" (1977: 41, emphasis in original). Incorporating these new understandings requires the abandonment of pro-growth economics and the adoption of a new vision. Daly presents his alternative in the form of the steady state.

Daly suggests that the "proper object of economic activity is to have enough bread, not infinite bread" (1973b: 281). He proposes a new sustainable economic discourse which embraces that objective. Daly proposes "a new economic theory that recognizes absolute scarcity and relative wants..., and consequently shifts its perspective from growthmania to the steady state" (1977: 44).

The steady state proposed by Daly is a derivative of the stationary state described briefly by John Stuart Mill. Mill suggested that the eventual emergence of a utopian

stationary state was the ultimate objective of economic growth (Daly, 1973). Growth is not a goal from this perspective, but a means to an end.

According to Daly, the steady state economy can be defined

by constant stocks of physical wealth (artifacts) and a constant population, each maintained at some chosen, desirable level by a low rate of throughput--i.e., by low birth rates equal to low death rates and by low physical production rates equal to low physical depreciation rates, so that longevity of people and durability of physical stocks are high (1974: 15).

Daly stresses that the steady state is required because of biophysical and ethicosocial constraints which prevent continuous economic growth. The steady state economy is a physical concept, meaning that physical growth is no longer a goal so population and material goods must be held constant, but non-material development is not impeded (Daly, 1977).

While the physical aspects of the steady state must, by definition, be held constant, numerous non-physical aspects are not. "[C]ulture, genetic inheritance, knowledge, goodness, [and] ethical codes" (Daly, 1977: 16-17) are not held stationary. Quantitative growth is eliminated, but qualitative improvement is encouraged. Growth is condemned, but development is commended.

INSTITUTIONS OF THE STEADY STATE

According to Daly, there are three primary institutions required to maintain the steady state. They are:

- (1) an institution for stabilizing population,
- (2) an institution for stabilizing physical wealth and keeping throughput below ecological limits, and...,
- (3) an institution limiting the degree of inequality in the distribution of the constant stocks...(1974: 19).

Daly advocated a population control method for the steady state economy which was originally proposed by Boulding. Boulding suggested a highly detailed policy of transferable birth licenses. The basic plan proposes to grant each woman (or couple) a license to bear one child. She/They may then choose to have a child or sell the license to the highest bidder. Any woman (or couple) who has a child without the proper license would face severe tax penalties or, possibly, even more severe retribution.

Boulding also suggested that the number of licenses required to have a child could be modified to allow the governing institution to periodically adjust the population replenishment rate. If population was decreasing, fewer licenses would be required to have a child. If population was increasing, more licenses would be required. (For a brief, but more detailed discussion of Boulding's plan, see

Daly, 1977: 56-61.)⁵

Daly also proposes an institution to stabilize physical wealth and keep throughput below ecological limits. Daly defines throughput as the "flow of matter-energy from nature's sources, through the human economy, and back to nature's sinks" (1977: 36). Rather than forcing companies to produce durable products, or taxing polluters, Daly proposes strict monitoring of resource depletion. He believes that "it is physically easier to monitor and control depletion than pollution" (1973a: 165) because there are comparatively fewer locations where resources are extracted than sources of potential pollution.

Depletion can be controlled either via strict depletion quotas or taxes on depletion. Either method allows the controlling institution to adjust resource extraction to meet the needs of the steady state. Strict depletion controls will, Daly suggests, encourage manufacturers to produce the durable goods required by a steady state economy (1977).

Finally, and according to Daly, most important, is the need for the creation of an institution designed to limit

⁵ It is important to note that many less-developed countries have adopted birth control policies similar to the one outlined within the steady state discourse. China and India are perhaps the most well known practitioners of such policies.

the degree of financial inequality in the steady state economy. Daly believes this to be an important goal because "[e]xchange relations are mutually beneficial [only] among relative equals" (1977: 54). To ensure relative equality among individuals in the steady state, Daly proposes the establishment of an institution which would determine and enforce minimum limits on income and maximum limits on both wealth and income via taxation and redistribution policies. The limits would go a long way towards guaranteeing relative equality "while leaving room for differential reward and incentives within reasonable limits" (1974: 20).

Minimum income guarantees could be maintained with the adoption of a guaranteed income. The minimum income should be set to allow an individual, or family, to meet the basic living requirements of food, clothing, and shelter. The minimum income would, according to Daly, prevent wealthier individuals from exploiting less fortunate individuals (Daly, 1977; See also Johnson, 1973).

Maximum limits on income and wealth would similarly prevent the rise of a significantly wealthier class which would be capable of exploiting less wealthy individuals. According to Daly, maximum limits would also prevent the infinite expansion of relative wants. Less money would be available for the purchase of the trivial wants which currently increase economic growth, but which Daly believes

fail to increase happiness and actually contribute to the degradation of the environment (1977).

TRANSITION TO THE STEADY STATE

John Hardesty, an advocate of the steady state approach, believes that "zero GNP growth, and perhaps even zero GNP will ultimately be realized, either positively through cultural-political revolution or negatively through complete depletion and destruction of the environment" (1971: 106). Daly agrees, but suggests that "the economic steady state will be desirable socially long before physical limitations will make it necessary" (1973b: 117)⁶. He believes that the steady state is inevitable, but that a peaceful transition to the steady state will require a period of moral growth to allow humanity's moral understanding to catch up with its technological progress and overcome the amoral tendencies of the existing growth economy. The moral growth is required in order to cultivate the concern for future generations which underlies the steady state approach (1977, especially chapter 8).

The most difficult objective of the steady state advocates, in Daly's opinion, is to convince economists,

⁶ More recent advocates of the steady state are not as optimistic as Daly. William Ophuls laments that "it is probably much too late for a carefully planned transition to the steady state" (1992: 283).

politicians and members of the public that the only solution to the problems of growth is not to grow. While the changes Daly requires must occur within wealthy industrialized societies, he believes that external pressure will help prod these societies toward the ultimate adoption of the steady state approach. Daly suggests that "[o]ne of the major forces necessary to push the overdeveloped countries toward a [steady state economy] will be Third World outrage at their overconsumption" (1977: 148). According to Daly, "[o]nce we have replaced the basic premise of 'more is better' with the much sounder axiom that 'enough is best,' the social and technical problems of moving to a steady state become solvable, perhaps even trivial" (1977: 2).

Once the difficult task of convincing the populace to abandon the mentality of the 'growthmaniacs' and adopt the steady state perspective has been achieved, change becomes, according to Daly, relatively easy to implement. Daly believes that any conception of the steady state will have to adopt some form of each of the three institutions he outlines. Once the decision to adopt a steady state economy has been made, "[b]irth quotas, depletion quotas, and distributive limits can all be varied continuously and applied with any degree of gradualism desired" (1974: 20).

Summary and Critique

The steady state discourse presented by Daly suggests that the ultimate problem plaguing modern society is a finite resource base that can not continue to support uncontrolled population growth, continuous economic growth, or excessive economic inequality. Daly supports his contentions with empirical data which indicate increasing population growth, increasing economic inequality, increasing resource extraction and decreasing resource availability. The trends are combined to produce evidence which suggests physical limitations to future material growth.

Daly also presents arguments which contradict the theoretical foundations of what he labels "growthmania." These arguments include discussions about the lack of a distinction between absolute and relative wants, the need for the reintroduction of morality into economic decisions, the confusion of growth with development, and the intentional disregard for the biophysical and ethicosocial limits to growth.

Daly presents his solution to these problems within the concept of the steady state. The steady state, as discussed earlier, includes a constant stock of physical wealth, a constant population and a low rate of throughput. His presentation of the steady state solution is not limited to

a purely pedagogical exercise but includes specific references to "birth quotas, depletion quotas and distributive limits" (1974: 20) as well as the institutions necessary for their implementation.

Some of the specific recommendations presented within the steady state discourse have already been accepted and implemented, to a limited degree, in some parts of the world. Institutions designed to enforce birth quotas have been established and utilized to reduce population growth in several less developed countries (LDCs). Similar attempts have been made to attain and maintain sustainable population rates. In fact, China and India have both had some success curbing population growth utilizing the methods detailed within the steady state discourse.⁷

Depletion quotas are also being discussed and implemented in a variety of contexts. Perhaps the most visible current example is the debate over logging quotas in United States national forests. Attempts to preserve old growth forests have included increasing references to sustainable resource extraction quotas. Similar quotas have been discussed in connection with mining and fishing

⁷ A recent Washington Post article outlined the decreasing birth rate in China. The article concluded that the decreases were due to the Chinese governments aggressive enforcement of birth control quotas, which include tax incentives, fines, and mandatory sterilization policies. (Washington Post, April 16, 1993, A1)

industries (Gore, 1992).

Finally, the suggestion, within the steady state discourse, that Gross National Product (GNP) is an inadequate measure of growth is being addressed within the conventional political and economic discourses. Gore and others have proposed modifying the measurement of GNP so that it more accurately incorporates and reflects the environmental costs of growth. Doing so, advocates argue, would encourage GNP-conscious industrial nations to alter their production practices and environmental policies along sustainable paths in an attempt to maintain high GNPs.

It is important to realize, however, that the application of these individual components of the steady state solution does not represent a broader acceptance of the steady state critique. The birth-quota policies pursued by many LDCs do not represent attempts to establish and maintain a steady state. They are instead perceived as paths of economic growth; a purpose which is contrary to the agenda presented within the steady state discourse. Similarly, the use of quotas in the United States has not been proposed as part of an attempt to adopt the steady state perspective, but as an attempt to protect the spotted owl or the aesthetic value of the old growth forests. These examples do demonstrate, however, that it is not just the language of sustainability that is being adopted. Some of

the specific radical sustainability solutions have also entered the mainstream, even if divorced from their original context.

The language and some of the solutions presented within the steady state discourse may have been adopted by the conventional discourses, but the underlying anti-growth perspective of the steady state discourse has not been similarly incorporated. Some radicals might suggest that this selective incorporation is an example of the cooption of "defused" radical language and solutions; solutions which are no longer capable of threatening the foundations of the modern industrial society. Such selective incorporation might also reflect, however, the unresolved problems inherent within the steady state discourse.

The steady state discourse suffers from several weaknesses which may explain why it has not been unreservedly incorporated into the solutions emerging from conventional political and economic discourses. The primary problems of the steady state discourse are: 1) the inability to completely "prove" resource finitude; and, 2) the lack of any defined basis for making the "moral" economic decisions required by the steady state approach.

The concept of finitude, the notion that the earth has a specific "carrying capacity" determined by a limited supply of resources, is contested by those who suggest such

concerns are overrated.⁸ They argue that the Malthusian "gloom and doom" predictions about excessive population growth and the decreasing availability of natural resources have always been averted by technological advances which lead to more efficient resource use or the discovery of new resources. There is no reason, they argue, to expect a reversal in this pattern. If the concept of finitude is a construct of overly-concerned ecologists, then there is no reason to adopt the economic logic suggested by the steady state discourse. There is no reason, they argue, to abandon the pro-growth orthodoxy.

Even if limited resources do impose constraints on materially based economic growth, there is an additional unresolved problem within the steady state discourse. The discourse suffers from an inadequate explanation of the new "moral" approach to economic decision making. Daly and others describe the need for a moral approach to economic decision making, but do not provide the means of making the required moral decisions.

Daly proposes a moral distinction between growth and development. He acknowledges that these concepts were originally synonymous, however, he suggests that they are now mutually exclusive because of the biophysical and

⁸ Two authors who contest the limited supply of resources are Kahn (1982) and Simon (1987).

ethicosocial limits to growth. Daly recommends that society abandon its emphasis on material economic growth in favor of non-material personal and community development. He fails to adequately acknowledge, however, that some forms of personal and community development may require material and economic growth. New forms of communication, for example, will allow for greater exchanges of information and ideas which may contribute to personal/community development. These new technologies will, however, most likely require material and economic growth to implement. The distinctions between growth and development may not be as absolute, as easily identified, or as important as Daly suggests.

Daly makes a similar moral distinction between absolute and relative wants. The distinction is easy to establish on a theoretical or metaphysical level -- (absolute wants are those desires essential to physical survival; all other wants are relative) -- but, the practical implementation of such a distinction is impossible. For example, survival in a large information society like the United States may require a broader conceptualization of absolute needs than is required for survival in a small agrarian society like Ethiopia. Computers, telephones, fax machines, and other information technologies may be considered absolute needs in the context of an information society. This leads to the possibility that absolute wants/needs may prove to be just

as insatiable as relative wants/needs are. The distinction between absolute and relative wants may not be as easily defined, or as relevant as Daly suggests.

Daly also suggests that current economic decision making tools are inappropriate because they do not consider the needs of future generations when allocating resources. He makes a moral distinction between the wants/needs of present generations and the wants/needs of future generations. Daly does not, however, suggest an adequate alternative to the present economic tools or provide a means of determining when, and if, future generations possess a greater moral claim to presently available resources.

A similar lack of detail, within the steady state discourse, reduces the functional significance of the proposal to reduce the modern level of excessive income inequality. The steady state discourse contains a detailed explanation of the need for greater income equality. Its champions suggest that this goal can best be attained by imposing limits on minimum income, maximum income and maximum wealth. However, there is no adequate discussion of how to define excessive income inequality; how to determine the limits to be imposed; or, who will determine the limits. The existing distribution process is criticized, but, again, there is no adequate alternative presented.

Finally, the steady state discourse does not fully

analyze the political difficulties that would be encountered in the attempt to reorient the pro-growth mentality and policies of the current industrial society towards an anti-growth perspective. These new policies would be, as Machiavelli (1513) suggested, opposed by all who benefit from the current system and only half-heartedly embraced by the beneficiaries of the new order. Daly suggests that the most difficult problem is convincing people of the inevitability of change and he proceeds to suggest that "[o]nce we have replaced the basic premise of 'more is better' with the much sounder axiom that 'enough is best,' the social and technical problems of moving to a steady state become solvable, perhaps even trivial" (1977: 2). It may prove, however, to be even more difficult to explain how to get from here to there.

Chapter Three
SIMPLE LIVING

"He who knows he has enough is rich."

- Tao Te Ching

OVERVIEW

The 1973 publication of Small is Beautiful propelled E. F. Schumacher into the limelight of the emerging radical sustainability discourse. He embarked on a slightly different interpretation of sustainability than the steady state discourse of Herman Daly. Drawing inspiration from the teachings of Christianity, Taoism, and Buddhism and the writings of Thoreau and Emerson, Schumacher contextualized sustainability within a conception of modern industrial society as an inherently unsuitable means for preserving the very essence of humanity. Schumacher's later writings continued his discussions on the inherent lack of sustainability which he believed permeates all aspects of modern society. Schumacher not only critiqued modern industrial society but attempted to provide the metaphysical foundations for a new societal direction. He argued for specific changes in the organization of society which he hoped would lead to a more sustainable society.

These changes would include, according to Schumacher,

greater decentralization of authority and responsibility. They would require the restructuring of de-humanizing work and an emphasis on personal growth rather than material growth. The changes he proposed would encourage the use of "intermediate technologies" and the adoption of a less violent approach to nature. These changes would also require changes in individual lifestyles. They would require the rejection of materialistically inclined orientations in favor of simpler lifestyles.

Schumacher recognized that these changes would not and could not occur without the direct participation of individuals at the grass roots level. Other cultural theorists, particularly Duane Elgin, began to expand upon the voluntary lifestyle changes that Schumacher's approach would require. Elgin reintroduced the term "voluntary simplicity" to describe these changes and systematically studied individuals participating in such alternative lifestyles. The goal of such voluntary changes was to achieve a sustainable society which would protect the very essence of humanity, which Schumacher believed includes the precarious natural balances between work and play, between the economic and social realms, between the spiritual and empirical worlds, and between the individual and the community.

SCHUMACHER'S ARGUMENT

Throughout his writings, Schumacher identified several problems he believed were inherent in Western industrial society. These problems include: the generation of pollution and other environmental toxins; rapid resource depletion; the increasing complexity of life and lack of adequate leisure time; and, violent actions directed against segments of humanity and against nature. These problems, according to Schumacher, can not be solved by "any political or economic reform, or scientific advance, or technological progress" (1979: 36). The problems are not economic problems; the economic problems are only a symptom. The problems are not political problems; the political problems are only a symptom. The problem is instead "a moral problem" (1977: 140).

Schumacher believed "[w]e are suffering from a metaphysical disease, and [that] the cure must therefore be metaphysical" (1973: 94). He believed that modern Western industrial culture is suffering from a form of metaphysical malaise. This malaise allows the dominant production/consumption system to undermine important aspects of humanity and instead emphasize "human vices such as greed and envy" (1973: 29). The result is an erosion of the essence of humanity.

Humanity, as Schumacher understood it, may be

threatened with the danger of becoming unsustainable. Individuals should not, according to Schumacher, allow themselves to simply become complex biochemical machines functioning as tools of destruction, production, and consumption.¹ Schumacher believed that this is a very real danger if the individual members of society do not remove their metaphysical blinders.

Schumacher believed the evidence of this "metaphysical blindness" (1973) was apparent in the multiple problems currently faced by modern society. The problems are not separate problems of an economic nature, a political nature, a sociological nature, or a technical nature. The problems are instead related by a shared Western metaphysical perspective which reduced the holistic human character to a simplified production/consumption machine. The metaphysical problems manifested within social, political, and economic discourses which encourage non-sustainable practices. Schumacher believed the metaphysical problems inherent with these discourses are most evident in examinations of: 1) the "science" of economics, 2) by the function of work in the economic system, and 3) in the technologies employed by

¹ Henry David Thoreau expressed a similar concern during his stay at Walden Pond. Thoreau suggested that work prevents an individual from enjoying the fruits of life. An individual "has no time to be anything but a machine" (1854: 7).

the economic system.

'SCIENCE' OF ECONOMICS

Schumacher, in the opinion of many economists, took an unusual approach to the study of economics². He suggested that economists, like the rest of society, suffer from a metaphysical blindness which prevents them from analyzing what was, in Schumacher's mind, truly most important--the role of people. People are the most important aspect in any system, including an economic system, according to Schumacher. However, modern economics has emphasized, instead and to the detriment of Western humanity, the products produced by people, not the people. Schumacher suggested that this perspective needs to change and called for "a new [economic] model--a model based not on goods but on people" (1974: 274).

Schumacher argued that a holistic approach to economics is needed instead of the modern reductionist strategies presently employed. He proposed that such a holistic approach might be best conceptualized by adopting a meta-economic perspective based on Buddhist philosophy. Schumacher outlined the notion of "Buddhist Economics" in

² One reviewer even noted that Schumacher "quotes Mahatma Gandhi and St. Luke more often than Ricardo and Adam Smith" (Cornish, 276).

1973 and used the concept as a foil for broad critiques of modern economic reasoning.

Buddhist economics suggests that the primary problem with current economic theory is that it overemphasizes the material aspects of human productivity. Modern economists assume that the 'standard of living' of a society can be computed by the amount of consumption. Economists rely on "a purely quantitative concept" (1979: 125), Gross National Product (GNP), in an attempt to measure the quality of people's lives. They assume that the more an individual consumes, or is capable of consuming, the higher the standard of living.

According to Schumacher, happiness has been equated with consumption in the equations of the modern economist and in the perspectives of many in the modern Western society. The search for happiness has been reduced from a search for the total human experience to a search for material prosperity. The resulting materially oriented perspective has systematically cultivated "human vices such as greed and envy" (1973: 29) which interfere with and limit what he perceived as the ideal human experience.

Current production techniques, according to Schumacher, concentrate on the "cultivation and expansion of needs" (1973: 31). Creating needs is one method of increasing consumption. Producers have succeeded in achieving this

goal with the help of the multi-million dollar advertising industry. Overall, consumption has increased but Schumacher contends that happiness and satisfaction have actually decreased.³

Modern economists, however, are not studying people. They are instead concentrating on the production, transportation and consumption of manufactured goods and services. It is Schumacher's belief that their limited perspective is based on a belief that any increase in production and consumption opportunities is ultimately and unquestionably beneficial to humanity. Modern economists, therefore, encourage unsustainable economic growth.

Schumacher questioned the goal of continual economic growth. He critiqued the goal on two grounds. First, he questioned the common economic assumption of the infinite

³ Recent articles by Alan Durning (1993, 1991) attempt, within the limits of survey analysis, to provide some empirical evidence for Schumacher's contention that happiness has not increased proportionally with consumption. For example, Durning notes that the same percentage of people rated themselves as "very happy" in both 1992 and 1952. Forty years of additional consumption opportunities have not led to an increase in self-reported happiness.

Durning concludes that "[p]eople living in the 1990s are on average four-and-a-half times richer than their great-grandparents were at the turn of the century, but they aren't four-and-a-half times happier" (1993, 23). Consumers have, he suggests, been "hoodwinked" by the dominant culture into believing that more is better and that happiness lies in the quantity of their material possessions rather than the quality of their personal relationships. Durning also believes, however, that people are beginning to recognize the discrepancy.

availability of required natural resources or the assumption of technologically derived substitutes. Schumacher believed firmly in the limited nature of the resources on "Spaceship Earth" (1973: 13, adopting the terminology of Boulding, 1966).

Second, Schumacher was concerned about "the capacity of the environment to cope with the degree of interference" (1973: 28) involved in conceptions of continuous economic growth. During the 1970s, the period when Schumacher was writing, scientists were just beginning to explore empirical evidence which supported their contentions that the actions of humanity were negatively affecting the operation of the global eco-system. Schumacher agreed and suggested that the material affluence and level of consumption enjoyed in Western industrialized countries was not worth the potential damage inflicted on the environment.

Schumacher believed that due to increasing evidence of environmental destruction, the industrialized nations of the world need to abandon their emphases on increasing both consumption and growth. Schumacher acknowledged that "[i]nfinite [material] growth in a finite environment is an obvious impossibility" (1973: 46). He was concerned not only that modern economists encourage continual material growth, but that they apparently have no conception of 'enough.' Continual growth is the primary goal of modern

economic theory. According to Schumacher, "[t]he word 'stability' has been struck from [the modern economist's] dictionary" (1979: 30). To counter the economically rational pursuit of growth, Schumacher called for a new economic discourse, an "economics of permanence" (1973: 33).

A Buddhist economic approach, according to Schumacher, represents one approach to the study of permanence. Such an approach would involve a "systematic study of how to attain given ends with the minimum of means" (1973: 55). The goal of the Buddhist approach would "be to obtain the maximum of well-being with the minimum of consumption" (1973: 54). The new approach would provide not only environmental benefits but would allow humanity to rediscover the important non-material aspects of life. Maximizing well-being while reducing consumption requires not only producing and consuming less but producing and consuming differently.

One of the necessary changes in production technology mandated by a Buddhist economic approach is reducing the scale of production. Schumacher suggested that earlier attempts to centralize production and increase 'productivity' led to large-scale, highly technical, capital intensive, and ultimately dehumanizing factories. Unnecessary large-scale production continued, according to Schumacher, because of the mistaken belief that 'bigger' is always 'better.' The result, according to Schumacher, is

that "we suffer from an almost universal idolatry of giantism" (1973: 62).

Schumacher could not "see anything that man really needs that cannot be produced very simply, very efficiently, very viably on a small scale with a radically simplified technology, with very little initial capital, so that even little people can get at it" (1979: 21). The benefits of decreasing the scale of production include increased personal/communal autonomy; additional work opportunities; local factories for local needs; reduced transportation costs; and a greater personal connection to one's work and the products of one's work. Naturally, changing the scale of production also involves changing the nature of work.

THE NATURE OF WORK

Schumacher expressed disgust with the traditional economic view of work. Modern economists, Schumacher argued, are overly concerned with the products of work rather than the experience of work. According to the modern economist, "money is the sole reason for working" (1979: ix). Work, in the traditional economic perspective, is viewed as a means of obtaining the necessary remuneration which allows for ever greater participation in the consumer society. Schumacher disputed this contention and instead suggested that work serves three primary purposes (1979,

1973). The three functions of work identified by Schumacher are:

- 1) Work allows and promotes the spiritual growth of each individual worker;
- 2) Work allows the individual worker to engage in and enjoy the communal work experience; and, finally
- 3) Work results in the creation of goods and services.

First, in discussing the spiritual aspects of work, Schumacher quoted J. C. Kumarappa;

If the nature of the work is properly appreciated and applied, it will stand in the same relation to the higher faculties as food is to the physical body. It nourishes and enlivens the higher [individual] and urges [them] to produce the best [they are] capable of. It directs [their] free will along the proper course and disciplines the animal in [them] into progressive channels. It furnishes an excellent background for [an individual] to display [their] scale of values and develop [their] personality. (1973: 52-53)

Second, work, according to Schumacher's holistic interpretation, is one of the most important social functions of humanity. The true foundation of human society, "next to the family, ... is work and the relationships established by work" (cited by Cornish, 279). For this reason, time devoted to work is just as important for the further social development of humanity as leisure. Schumacher suggested that work and leisure are

"complimentary parts of the same living process and cannot be separated without destroying the joy of work and the bliss of leisure" (1973: 52).

Third, and finally, work results in the production of goods and services. Schumacher, unlike most modern economists, did not place any additional importance on this final function of work. According to Schumacher, work serves at least three equally important functions, only one of which is the manufacture of goods and services. The traditional economic approaches have centered only upon this latter function.

A holistic economic approach can not fail to include the spiritual and communal aspects of work. Failing to acknowledge and account for the multiple functions of work threatens to erode one of the important pillars of humanity. An economic discourse which views work only as a means of production allows the worker no time to be human. A worker "has no time to be any thing but a machine" (Thoreau, 7).

Work, from Schumacher's perspective, should not make the worker less human. Schumacher expressed opposition to the "soul-destroying, meaningless, mechanical, monotonous, moronic work" (1973: 35) currently favored by large-scale, highly 'efficient,' highly 'productive' factories. Schumacher feared that this approach to work "rots the

brains" (1977: 95) and that such "meaningless work is an abomination" (1979: 119). He further suggested that "[m]indless work is ["even more intolerable"] in a society that wishes to be sane and civilized [than] filthy air or stinking water" (1977: 95).⁵

The solution, according to Schumacher, is a new and "proper philosophy of work" (1973: 34). It is, however, first necessary to abandon the reductionist view of work which perceives work solely for the purpose of earning a living. Schumacher believed that every individual has something to contribute and gain by working. Paraphrasing St. Thomas Aquinas, Schumacher suggested that "there can be no joy in life without joy of work" (1979: 118).

Work, from the Buddhist perspective, is as necessary to human existence as breathing. The new philosophy of work would, therefore, include abandoning "mass production" in favor of "production by the masses" (1974: 274).

⁴ Thoreau similarly suggested in the conclusion of Walden (1854) that workers be wary of "brain-rot" (261).

⁵ It is important to note that there have been some relatively recent changes in the production techniques criticized by Schumacher. The most important is the emergence of post-Fordist production models which emphasize the importance of flexible specialization. Flexible specialization allows a worker to become proficient in more than one task thereby enabling them to serve in more than one production capacity. Whether these changes are being implemented primarily for the spiritual benefit of the workers or the financial profits of the producers remains highly contestable.

'Production by the masses' implies a communal approach to work which stresses the social as well as productive aspects of work. The new philosophy would require the abandonment of large-scale production facilities in favor of smaller, local means of production. Smaller production facilities would mean more work for more people. The traditional measures of 'efficiency' and 'productivity' would have to be discarded in favor of measures which were capable of emphasizing human development.

The new philosophy would also require the abandonment of "meaningless work," work that is not directly related to the production of basic needs. Such "meaningless work" often exists in occupations with purely administrative functions. This would include the advertising profession which not only does not contribute to the production of basic needs, but is designed to encourage and even create the consumption of socially constructed needs. Such "meaningless work" is not only non-beneficial for the participants but its unsustainable aspects are ultimately harmful for the rest of society. There are, in addition, metaphysical dangers of "meaningless work." Quoting Schumacher,

The widespread substitution of mental strain for physical strain is no advantage from our point of view. Proper physical work, even if strenuous, does not absorb a great deal of the

power of attention, but mental work does; so that there is no attention left over for the spiritual things that really matter. It is obviously much easier for a hard-working peasant to keep his[/her] mind attuned to the divine than for a strained office worker (1979: 25).

Modern economics, according to the Buddhist economic approach, has ignored several of the primary functions of work. This reductionist approach has allowed modern industrial capitalism to remove the inherent pleasure of work by reducing it to its most basic form. Simple repetitive motions are not the kind of work humans are capable of enjoying. However, repetitious work is encouraged by the current incomplete comprehension of the role of work, by the mistaken belief in "an unlimited supply of people who are prepared to do mindless repetitive work for quite modest remuneration" (Schumacher, 1979: 97), and by the type of technologies currently employed.

TECHNOLOGY

Schumacher noted a distinction between "science for understanding" and "science for manipulation." He suggested that modern industrial societies have disregarded the former, which is the path to true wisdom, and embraced the latter. The result has been an incomplete knowledge which is appropriate for material growth, but hazardous to

spiritual understanding.

A similar dichotomy exists in the technology employed by industrialized nations. The reductionist conception of economics which permeates the Western economic system, including the understanding of the purpose of work, also affects the technologies employed by the system. According to Schumacher, technology can be quite liberating when it is easily accessible by the majority. However, large-scale, capital-intensive technologies are often enslaving. Schumacher suggested that Western society's misguided pursuit of material happiness rather than true happiness led to an emphasis on exploitive technologies.

Schumacher identified four primary unsustainable aspects of modern technology. First, there is the mistaken belief that 'bigger is better.' As discussed earlier, Western manufacturers became fascinated with large scale production facilities to the extreme exclusion of smaller scale manufacturing plants. These large-scale facilities are efficient only in a very limited sense. They are capable of producing large quantities cheaply, but they require a homogenous demand. Smaller production facilities are capable of less standardized production techniques, but what they gain in production flexibility, they lose in traditional economic conceptions of efficiency. The human need for these smaller, human-scale, sustainable production

facilities goes unheeded because they are labelled 'inefficient.'

Second, modern technology has tended towards greater and greater degrees of unnecessary and unsustainable complexity. Automatic car transmissions and power windows, for example, are not required for the successful operation of an automobile. They are, instead, further examples of non-sustainable resource use. However, such complexity does contribute to economic growth by increasing the cost of the car. It also increases the likelihood and cost of repairs. This type of unnecessary complexity disempowers the majority of the population. Specialized knowledge is required for the manufacture, repair, maintenance, and, in some cases, the operation of such complex technologies. Increasing technology, according to Schumacher, is "a kind of disease" (1979: 52). It is a disease which debilitates the individual's autonomy and ultimately their humanity by institutionalizing unsustainable practices.

Third, technology has become extremely capital intensive. Technology is no longer available to individuals with minimal means. According to Schumacher, "you have to be already rich and powerful before you can really do anything" (1979: 53). Technology has become a "principle of exclusion" (55) used to limit people's access to the means of self-improvement. Access has been limited to people who

can afford to pay.

Fourth, Schumacher believed that technology has become increasingly violent towards nature. The by-products of highly technological production techniques are destroying the ecological foundations of the planet. (The possible CFC-ozone connection was not known to Schumacher but provides a modern example.) Many of the products of modern technology are also harmful. (For example, personal automobiles instead of mass-transportation.) Schumacher suggested that this type of violence is unsustainable and can not be allowed to continue (1979).

Schumacher believed that as uni-dimensional, profit-oriented growth progressed, technology became an increasingly important part of the search for economic profit. The search for ever increasing profits led to the ever increasing cost of technology. As technology became more and more expensive, it was increasingly controlled by a smaller and smaller percentage of individuals. Technology was no longer accessible to the majority.

One result is that people have lost control of their destinies. According to Schumacher,

new technologies are developed only when people of power and wealth back the development. In other words, the new technologies will reinforce the system. If the system is ruled by giant enterprises--whether privately or publicly owned--the new technologies

will tend to be 'gigantic' in one way or another, designed for 'massive breakthroughs,' at massive cost, demanding extreme specialization, promising a massive impact--no matter how violent...(1979: 44 - 45, emphasis in original).

'Big' technology has managed to escape the control of the majority. This phenomenon has trapped the majority in an economic system that may destroy the very essence of their humanity (1977). Schumacher believed that the solution to the problems plaguing society was to change the technologies employed by society. According to Schumacher, there is "no better way of changing the 'system' than by putting into the world a new type of technology-- technologies by which small people can make themselves productive and relatively independent" (1979: 43) of the larger exploitive economic system. The solution, according to Schumacher, is the adoption of non-violent, intermediate and sustainable technologies.

Intermediate technology, which Schumacher also referred to as "appropriate technology," refers to a technology which tends towards smallness and simplicity. Intermediate technology is not very capital intensive and is non-violent (Schumacher, 1974). According to Schumacher, "[n]onviolence, in this context, refers to modes of production which respect ecological principles and strive to work with nature instead of attempting to force their way

through natural systems" (1979: 57).

Schumacher suggested changes in the standard economic perspective which would transform the way human satisfaction, work, and technology are perceived. These changes would require and be facilitated by the adoption of a new lifestyle.

A NEW LIFESTYLE

Schumacher created the basis for a new radical discourse on sustainability in which he called for a new lifestyle. He conceived a "new life-style, with new methods of production and new patterns of consumption: a life-style designed for permanence" (1973: 19). He suggested that the necessary changes could not possibly be implemented as part of "any political or economic reform, ...scientific advance, or technological progress" (1979: 36). The problems, he said, "lie too deep, in the heart and soul of every one of us. It is there that the main work of reform has to be done--secretly, unobtrusively" (36). Schumacher provided very little additional elaboration of the process. Duane Elgin, however, noted that part of the counter-culture movement of the late 1960s and early 1970s followed and elaborated upon an agenda similar to the proposals outlined within the sustainability discourse presented by Schumacher.

Elgin examined individuals and groups of individuals

practicing what Thoreau identified as "voluntary poverty" (1854: 14). The "new" counter-culture lifestyle shares remarkable similarities with the Puritan teachings of frugality and self-sufficiency; to Emerson's plea for "plain living and high thinking" (cited by Elgin, 1981: 28); the teachings of Christianity; and, the teachings of Gandhi. The individuals were putting the reasoning contained within the discourse outlined by Schumacher to an empirical test and thereby contributed to the further development of the discourse. Elgin adopted the phrase "voluntary simplicity" to describe the emerging lifestyle (1981, 1977).

According to Elgin, the phrase "voluntary simplicity" was first used by Richard Gregg in a 1936 article titled "Voluntary Simplicity" which appeared in the Indian journal Visva-Bharati Quarterly. Gregg provided a definition of voluntary simplicity, cited by Elgin, which outlined the grounds for a new sustainable discourse. Gregg suggested that

Voluntary simplicity involves both inner and outer condition. It means singleness of purpose, sincerity and honesty within, as well as avoidance of exterior clutter, of many possessions irrelevant to the chief purpose of life. It means an ordering and guiding of our energy and our desires, a partial restraint in some directions in order to secure greater abundance of life in other directions. It involves a deliberate organization of life for a purpose (1981: 31).

Elgin stresses that voluntary simplicity is, in practice, open to multiple definitions. This is due, in large part, from the 'grass roots' emergence of the movement. However, he is able to identify several key values embraced by the advocates of voluntary simplicity which paint a broad definition of the concept. These values, as identified by Elgin (1977), include:

- 1) Material Simplicity
- 2) Human scale technology
- 3) Self-determination
- 4) Ecological awareness, and
- 5) Personal growth.

Material simplicity is, naturally, "one of the core values of voluntary simplicity" (Elgin, 1977: 201). It involves a "non-consumerist life-style based upon being and becoming, not having" (201). Consumption is not only reduced, but modified. Goods are purchased to provide "lasting satisfaction," not just "temporary gratification" (1977). Along similar lines, Thoreau suggested that "[m]ost of the luxuries, and many of the so called comforts of life, are not only not indispensable, but positive hindrances to the elevation of mankind" (1854: 14). Advocates of voluntary simplicity have adopted such a perspective.

Alan Durning suggested:

For those who choose to live simply, the goal is not ascetic self-denial, but a sort of unadorned grace. Some come to feel, for example, that clotheslines, window shades, and bicycles have a

functional elegance that clothes dryers, air conditioners, and automobiles lack. These modest devices are silent, manually operated, fire-proof, ozone- and climate-friendly, easily repaired, and inexpensive. (1993: 24).

Material simplicity does not mean doing without, but rather doing without material non-essentials.

The adoption of human-scale technology is another important aspect of the voluntary simple lifestyle. Schumacher's critique of large-scale technologies suggested that workers were alienated from the joy of work. Human-scale technologies allow each individual to participate in a greater proportion of the production process, unlike the very limited participation common in the Fordist production technique. Each worker is allowed to enjoy the total work experience.

Human-scale technologies also include a reduction in complexity. Technologies are greatly simplified to reduce production and maintenance costs. Skilled experts are no longer absolute necessities.

The third value of voluntary simplicity identified by Elgin is self-determination. Self-determination is an attempt to reduce dependency upon large, complex bureaucracies. According to Elgin, "[s]elf-determination manifests itself as a desire to assume greater control over one's personal destiny and not lead a life tied to

installment payments, maintenance costs, and the expectations of others" (1977: 201). The desire for self-determination may even lead to attempts at growing and providing one's own sustenance.

Practitioners of voluntary simplicity also tend to possess a higher degree of ecological awareness than the general population. Their ecological concerns are often mentioned as the purpose for their adoption of a voluntary simple lifestyle (Elgin, 1981).

A final aspect of many practitioners of the voluntary simple lifestyle is the importance of personal growth. This interest may manifest itself in the study of many Eastern spiritual traditions, meditation techniques, or other 'inner growth' experiences. Schumacher suggested that the material concerns of modern industrial society tended to eliminate the opportunity for self-reflection and examination (1979, 1977, 1973). The spiritual aspects of voluntary simplicity allow an individual to counter, or eliminate completely, those tendencies. According to Elgin, "[v]oluntary simplicity, then, is not a path of 'no growth' but a path of 'new growth' (growth that includes both a material and a spiritual, or interior, dimension)" (1981: 37). That, after all, is what Schumacher suggested was most needed and most threatened by modern society.

THE TRANSITION

Schumacher did not spend much time discussing the implementation of the societal changes he felt were necessary for sustaining the complete human experience. Other than a few passing references to individual approaches to the changes, Schumacher did not mention the society-wide transition at all (1979, 1973). He apparently believed that members of society would all eventually recognize the need for change and adopt the new required perspective.

Elgin examines the transition aspects a little more closely. Elgin suggests that the world, and the United States in particular, may be currently experiencing a period of social/political/economic stagnation which may create opportunities for changes along the lines suggested within the sustainable discourse. He hypothesizes that "under conditions of growing social disarray..., the constructive actions of a relatively few persons could have a very positive influence in directing the course of social evolution toward a more workable and meaningful civilization" (1981: 133). He believes that "some critical mass of persons is essential to act as the catalyst for change" (133, emphasis added). It is possible, perhaps even probable according to Elgin, that this "critical mass of persons" would be composed of individuals voluntarily engaged in simple lifestyles.

Lester Milbrath (1989) discusses a similar hypothetical conversion to materially simple lifestyles. He suggests that the transition might conceivably be similar to the process of phase transition discussed by Hofstadter. A phase transition, according to Milbrath, is similar to the early morning process of waking up. An individual begins sound asleep. Gradually, the individual enters a stage somewhere between actually being asleep and actually being awake. Finally, all of a sudden, the individual is completely awake. Milbrath described Hofstadter's thesis as follows:

Hofstadter believes the waking of an individual has its parallel in the collective waking of a nation. A critical point is reached when the number of concerned citizens rises above a threshold, producing a quick turnaround at the national level. No one can predict how or when that will happen, but we know it does happen. These "phase transitions" happen in physical systems (for example, schools of fish, brains), groups, mobs, and countries... . Most of us, at some deep level, have a sense that our present social system is not working well, that we cannot keep going the way we have been. That feeling, which constitutes a kind of social learning as well as readiness for further learning, may be tapped some day by a massive confluence of thoughts or events. The whole society may quite suddenly turn around in a bewildering phase transition. Whatever social learning we have absorbed before such an event occurs will help if a time of great social turbulence comes upon us. (1989, 114).

The specifics of the transition to a simple lifestyle are disputed within the discourse, but it is agreed that the

transition will be peaceful and voluntary.

SUMMARY AND CRITIQUE

The simple living discourse, like other radical sustainability discourses, contains an indictment of the non-sustainable aspects of human society. This includes a critique of the modern emphasis on continual materially-based economic growth. Such economic growth is unsustainable, the radicals suggest, because there are physical constraints limiting the use of the necessary resources. The existence of such limits remains highly contested and problematic. The simple living discourse shares the difficulties of the finite-resource argument with the previously discussed steady state discourse.

Schumacher, one of the original advocates of the simple living discourse, suggested, however, that the critique of materially-based economic growth was not solely limited to the assumption of finite resources. He believed that the sustainability problems plaguing society primarily originate from a form of "metaphysical blindness" (1973) which reduces the holistic human character to a simplified production/consumption machine. According to Schumacher, the primary sustainability problem is the erosion of the essence of humanity, not the reduction of material resources.

The essence of humanity, according to conceptions presented within the simple living discourse, is being eroded by a reductionist economic perspective. The modern 'science' of economics has emphasized products not people. It has portrayed humanity as nothing more than cogs in the economic growth machine. The sustainability problem is due, according to Schumacher, to the wide-spread philosophical acceptance of this reductionist portrayal. Humans have begun to identify themselves with what they are capable of consuming rather than what they are capable of achieving. In order to escape the perils of the sustainability crisis, the metaphysical blinders which maintain this perspective must be removed.

Schumacher suggested the adoption of a new economic rationality, an "economics of permanence" (1973: 33) based on his conception of Buddhist economics. According to Schumacher, Buddhist economics would encourage the restructuring of de-humanizing work, utilize small-scale, "intermediate" production technologies, and stress personal rather than material growth. Buddhist economics would place its emphasis on people, not products. Work would be perceived as a multi-functional personal enterprise, not simply as a means of obtaining greater consumer power, as it is portrayed by the conventional economic perspectives. This reorientation of the metaphysical foundation of society

would, according to Schumacher, lead to the voluntary adoption of a new lifestyle, a lifestyle designed for permanence.

At least one aspect of this new lifestyle has been partially incorporated into conventional discourses and has been actualized within conventional society. New forms of labor organization have been introduced which acknowledge the need to abandon the "soul-destroying, meaningless, mechanical, monotonous, [and] moronic work" (Schumacher, 1973: 35) criticized within the simple living discourse. Post-Fordist production techniques, employing flexible specialization techniques, allow workers to participate in multiple parts of the production process. Japanese management techniques are also being introduced which provide workers with the opportunity to provide input into the organization of work (Thompson, 1989). These changes are similar to ones advocated by proponents within the simple living discourse.

There is no evidence, however, that the changes in the organization of work are being implemented as part of the reorientation of the metaphysical foundations of society. It is more probable that the new techniques are simply another attempt to encourage worker productivity and sustain the consumer lifestyle rather than an attempt to modify society along the lines advocated within the simple living

discourse. One might suggest that the new production techniques provide further evidence of the selective incorporation of the "defused" linguistics and solutions of the radical sustainability discourses as an attempt to silence the critics of industrial society. While it is possible, it is just as likely that this selective incorporation might reflect the mainstream difficulties with the unresolved or unaddressed problems identified within the simple living discourse.

The simple living proposals "sound good," but there is a regrettable lack of detail. No one within the discourse, including Schumacher, ever directly addresses the nature of the relationship between a society's metaphysical orientation and its level of sustainability. The relationship may not be as strong as Schumacher and others have suggested. The metaphysical orientation of a society may simply be one of many indicators that helps define its degree of sustainability.

The simple living discourse also contains no mention of the apparently overpowering ability of modern industrial capitalism to absorb and incorporate multiple philosophical orientations into the cult of consumerism. Modern history is clearly demonstrating that industrial capitalism is not limited to regions espousing Weber's (1958) Protestant work ethic. Industrial capitalism has been introduced and is

thriving in numerous cultures and societies, including many that include sizable Buddhist populations. History is illustrating that many different philosophies can be interpreted or reinterpreted to support capitalist objectives. Nothing within the simple living discourse appears to address this possibility.

Even if one assumes that a change in philosophical orientation is an adequate first step towards a sustainable future, the simple living discourse fails to address the means of transition to such a philosophical orientation. Schumacher specifically denies that the changes can be implemented via "any political or economic reform, or scientific advance, or technological progress" (1979: 36). He does not, however, suggest any detailed alternative means of implementing the changes. The few details which are provided within the discourse suggest only that the changes will be implemented on a voluntary basis by each individual member of society.

There is no discussion, within the simple living discourse, of the means to dismantle the large-scale industrial infrastructure or to provide the infrastructure necessary to complement the preferred small-scale approach. There is no discussion of the necessary political changes. "[T]he political problem of moving people toward voluntary simplicity is reduced to an unequivocal moral choice" (Luke,

1987: 306). All of the changes must apparently be realized on a personal and individual basis on the strength of moral suasion alone. There is not even any indication, within the discourse, of the means for disseminating information encouraging the voluntary simple lifestyle. Like the failings of the steady-state discourse, the simple living discourse fails to adequately address the means of abandoning the unsustainable practices of modern society and adopting a sustainable future. The goals presented within the simple living discourse may be admirable, but their incorporation into the conventional political, social and economic discourses is limited by the lack of detail devoted to the method or methods of acquiring those goals.

Chapter Four
SOCIAL ECOLOGY

"We do not simply live in a world of problems but in a problematic world, an inherently anti-ecological society."

- Murray Bookchin (1981)

OVERVIEW

Murray Bookchin believes, like the radical theorists discussed earlier, that the planet is currently faced with an ecological crisis that threatens the sustainability of human society. However, Bookchin, unlike many other environmental theorists, does not believe that the problems are ultimately related to a lack of food, overpopulation, pollution or a decreasing resource base. Bookchin suggests that even if technology is capable of rescuing humanity from the perceived environmental catastrophes, society will still face a sustainability crisis. The problems are not, according to Bookchin, purely visible quantitative empirical problems, but problems of a normative, social origin.

Bookchin attempts to contextualize sustainability within a discourse on domination. According to Bookchin, the environmental problems are only symptoms of a more serious and pervasive problem of excessive domination. The real sustainability crisis, according to Bookchin, is a

crisis of decreasing freedom caused by increasingly powerful institutional systems of hierarchy and domination.

Bookchin suggests that domination and hierarchy have evolved along with the emergence of humanity. Domination has progressed from the domination of the elders over the young, to the domination of man over man, man over woman, and the increasingly successful attempts of man over nature. He suggests that the environmental concerns are the inevitable results of man's attempts at domination,¹ including attempts to dominate nature.

Bookchin believes that "nearly all ecological problems are social problems" (1989: 24, emphasis in original). Therefore, the solutions require a total restructuring of society along ecological, non-domineering, pluralistic, decentralized, lines. According to Bookchin, "Either we will create an ecotopia based on ecological principles, or we will simply go under as a species" (1980: 71). Such changes are necessary not only for the sustainability of the non-human environment and human society, but for the

¹ Bookchin is quite careful in his use of gender-specific or gender-neutral terminology. Concurring with the conclusions of many eco-feminists, Bookchin believes that many of the ecological problems can be directly attributed to the institutionalization of male domination into the fabric of human society. Bookchin utilizes gender-neutral language where he finds it appropriate. In presenting the social ecology of Bookchin, I have attempted to adopt his linguistic interpretation.

continued existence of human freedom.

SOCIAL ECOLOGY VS. "ENVIRONMENTALISM"

Bookchin recognizes the diversity of the conceivable environmental problems plaguing humanity environment. These problems include the application of "violent" technologies, increasing or excessive population growth, and the emergence and continuous development of materially based consumerism. Bookchin believes that these reductionist 'causes' detract from what he perceives as the true, social origins of what is portrayed as the environmental crisis. The problems and solutions proposed by "single issue environmental groups" are ineffective and ultimately detrimental to the larger project of societal reform demanded by Bookchin's social ecology discourse. Bookchin is troubled by the "pragmatic environmentalists" (1989) and their "humble pleas for small reforms" (1980: 11). The single-issue "environmentalists" are more intent on "tinkering with existing institutions, social relations, technologies, and values than on changing them" (1980: 77). Radical social change is required, according to Bookchin, not mere "tinkering."

"If the ecology movement stops at mere reforms in pollution and conservation control--at mere 'environmentalism'--without dealing radically with the need for an expanded concept of revolution," according to

Bookchin, "it will merely serve as a safety valve for the existing system of natural and human exploitation...[and the] ecology movement will be reduced to a decorative appendage of an inherently diseased anti-ecological society" (1980: 43, 75). Bookchin is concerned that the limited agendas, "eco-babble" (1981) and "New Age Romanticism" (1991) of these "eco-freaks" (1980) has resulted in a directionless "mystical ecology" (1991) that has produced nothing but useless "Space-Age hokum" (1990). Bookchin believes that the 'environmental' movement is limited by a technical, reductionist understanding of the environmental crisis. He believes that a broader conceptualization of the problem, as outlined by his understanding of social ecology, is required.

Bookchin suggests that the leaders of the ecology movement need to abandon "strictly issue-oriented approaches" and make a "theoretical turn" (1990: 52, 53) towards "a holistic, socially radical, and theoretically coherent alternative to the largely technocratic, reformist, and single-issue environmental movements" (1991: xiii). The leaders must abandon the "environmental" discourses and adopt a social ecology perspective.

Changing perspectives requires a new conceptual clarity oriented towards an "organic reasoning" which eliminates the divisive dualistic thought patterns inherent in

"conventional reasoning." Bookchin believes that the ecology movement has deteriorated as a result of the anti-intellectual, "bumper-sticker slogan[eering]" (1988) of the 'environmental' movement which has tended to embrace "Taoist moods, Buddhist homilies, and Space Age platitudes" (1990: 138) rather than engage in "genuine thinking." The lack of intellectual clarity has prevented 'environmentalists' from comprehending the broadly based social causes of the ecological crisis, causes which are only explicable within a social ecology framework.

SOCIAL ECOLOGY

The social ecology discourse championed by Bookchin requires a broader, more holistic perspective and more radical revolutionary goals than the ones advocated by the single-issue mentality of the 'environmental' movement. According to Bookchin, social ecology operates with an assumption "that the ecological crisis that beleaguers [humanity] stems from a social crisis...[and] that the resolution of this social crisis can only be achieved by reorganizing society along ecological lines, imbued with an ecological philosophy and sensibility" (1990: 164).

Bookchin believes that the current ecological problems began with the social institutionalization of hierarchy and domination. He suggests that "[i]f we are to find the roots

of the present ecological crisis, we must turn not to technics, demographics, growth, and a diseased affluence alone; we must turn to the underlying institutional, moral and spiritual changes in human society that produced hierarchy and domination" (1980: 40). It is the institutionalization of these human attributes that has led to the systematic exploitation not only of humanity, but of the rest of nature. "[A]s long as hierarchy persists, as long as domination organizes humanity around a system of elites, the project of dominating nature will continue to exist," and according to Bookchin, will "inevitably lead our planet to ecological extinction" (1980: 76). The environmental crisis is "deeply rooted in an irrational, anti-ecological society" (1991: xiv). The solution, Bookchin suggests, must therefore include the "remaking" of society.

Before embarking on the rebuilding of society, it is necessary to understand the deep seeded social origin of the ecological problems. The social ecology advocated by Bookchin perceives the ecological crisis as the result of societal evolution, specifically, the institutionalization of domination. Social ecology operates with an assumption that

the very concept of dominating nature stems from the domination of human by human, indeed, of women by men, of the

young by their elders, of one ethnic group by another, of society by the state, of the individual by bureaucracy, as well as of one economic class by another or a colonized people by a colonial power (1980: 76).

In order to eliminate the unsustainable and unjust domination of nature, Bookchin argues that all forms of domination must be eliminated. Successfully eliminating the multiple forms of complex hierarchical domination requires a fuller understanding of the social origins of domination.

HISTORY OF DOMINATION

Domination, according to Bookchin, has not always existed in nature. It is not a "natural" phenomenon, it is a purely human construct. It exists only as constructed within human societies. Animal communities operate on "dominance-and-submission" relationships, which may mimic human domination and hierarchy, but these relationships, according to Bookchin, are genetically determined, as opposed to socially institutionalized, relationships². Domination can not, according to Bookchin, exist outside of

² Bookchin distinguishes between animal communities and human societies. Animal communities exist and are regulated by genetic "programming." Human societies are human communities which are regulated by social institutions. Social institutions are capable of change, while genetic programming is predetermined. According to Bookchin, "highly structured [non-human animal] behavior patterns, rooted in instinctual drives, are too inflexible to be regarded as social" (1991: 29).

human society.

Domination not only has not always existed in nature, but it has not always existed in human society. According to Bookchin's reconstructions of pre-history, society began as a completely egalitarian conglomeration of individuals. Men and women, young and old, hunter and gatherer all made distinct but equal contributions to the survival of the community. Distinctions between responsibilities were recognized as necessary and beneficial but were not classified by importance or difficulty and therefore did not serve as the bases for domination.

As human society evolved away from nomadic bands of hunter/gatherers and towards more stationary agrarian communities, the egalitarian nature of the societies began to deteriorate. Bookchin suggests that agricultural knowledge assumed an increasingly important role for success at harvest time. Agrarian knowledge accumulated through experience which meant that the elders in the community tended to serve as important sources of valuable information. According to Bookchin, the increasing importance of the older generations' knowledge led to perhaps the earliest form of domination; hierarchy. As the importance of knowledge increased, the social status of the elders increased and ultimately led to hierarchical societies organized around gerontocracies, "the earliest

form of hierarchy" (1989: 79).

Hierarchy, according to Bookchin, is perhaps the oldest, most successful, and most pervasive form of domination. Bookchin defines hierarchy as "the cultural, traditional and psychological systems of obedience and command. ...Hierarchy is not merely a social condition; it is also a state of consciousness" (1991: 4). The social acceptance of hierarchy results in the internalization of an organized system of domination. Domination becomes culturally and socially accepted and can eventually threaten the very freedom that humanity claims to value so highly (1991).

The institutionalization and evolution of domination continued with the evolution of human society. According to Bookchin, as the number of agricultural communities expanded, the frequency of contact with other agricultural communities increased. Contact with other communities led to the attempts of some communities to physically dominate others. As conflicts erupted and warfare became increasingly common, young male warriors began to be seen as the saviors of the community, specifically the protectors of women and children. The increased importance attributed to the warriors led to the "hierarchical growth of [the] male's civil domain" (1989: 76). Men began to assume a superior role in the community which led to the domination of women

by men and the emergence of patriarchal social institutions (1991).

With the emergence of the city, a "new social arena" was created based on geography and economic interests rather than 'primitive' tribal relations or purely agrarian interests. The "new social arena" allowed for the emergence of more intricate forms of domination (1989). Bookchin suggests that within the new social context of the city, the originally mutual beneficial social division of labor further

shed its traditional egalitarian features and acquired an increasingly hierarchical form. Man staked out a claim for the superiority of his work over woman's; later, the craftsman asserted his superiority over the food cultivator; finally, the thinker affirmed his sovereignty over the workers. Hierarchy established itself not only objectively, in the real, workaday world, but also subjectively, in the individual unconscious. ...Difference was recast from its traditional status as unity in diversity into a linear system of separate, increasingly antagonistic powers--a system validated by all the resources of religion, morality, and philosophy (1991: 63).

According to Bookchin, attempts at the organized domination of nature did not materialize until men had "already begun to dominate the young, women, and...each other" (1989: 44). Attempts to dominate nature emerge from the natural progression of the increasing role of

domination. It is the existence of domination, and directly, the attempt to dominate nature that has led to the ecological crises that so concern the "environmentalists." The attempts to dominate nature grew exponentially with the emergence of capitalism. The desire for increasing wealth and profits combined with new forms of increasingly complex and efficient technologies led to increasingly successful attempts to dominate nature.

Bookchin perceives the institutionalization of capitalism as the inevitable result of attempts to increase domination. "Market economies...existed before capitalism" (1989: 92) and capitalism, according to Bookchin, evolved from increasing attempts to dominate the market for individual gain. Market domination evolved into capitalism through the systematic destruction of the remnants of community and equality. The destruction occurred as competition came to be seen as "healthy," as "freedom" and "parsimony" were related to wealth, and as self-interest was equated, via the 'hidden hand,' to the "public good." According to Bookchin, these concepts were used "to subserve the unlimited expansion and wanton plunder--not only of nature, but of human beings" (1989: 92, 93).

The materially-oriented goals of capitalism have logically led to further increases in the domination of nature, including increasing domination of humans. The

internal logic of capitalism encourages, and has resulted in, the commodification of everything associated with the market. This includes the commodification of non-human nature, all goods and services, and ultimately, humanity.

Capitalism encourages commodification through the reduction of all aspects of production, capital, labor, and resources, into an amoral "quantitative domain of equivalences" (1980: 66). All aspects of production and consumption are assigned and equated with a monetary value. The value of an hour of human labor or an acre of tropical rainforest is equated with a determined market price. The search for profit, inherently logical within the capitalist mentality, encourages the continued domination of the laborer and additionally, the domination of non-human nature. The search for continual materially based economic growth encourages the further domination of not only humanity, but of non-human nature as well (1990).

The commodification of everything, both human and non-human, has increased the potential for further domination by transforming the market economy into a market society. The market society allows for increasing domination of the majority by an elite. Human freedom has been reduced to a controlled freedom to purchase a limited selection of pre-selected consumer goods. According to Bookchin, the history of domination continues. Further attempts to increase the

profits of the elite by reducing production costs may lead to the further erosion of human freedom by homogenizing demand, and ultimately homogenizing humanity. This would represent, according to Bookchin, the paramount form of domination (1990).

THE "REMAKING" OF SOCIETY

According to Bookchin, the rise of domination, which has proven so detrimental to both human and non-human alike, is the product of the organization and structure of human society. Domination is the creation of human society and can be eliminated by altering the social organization of society. Humans, unlike non-human species, are not genetically prevented from self-reorganization. Bookchin suggests that humanity must take advantage of that capability and "remak[e] society in a way that will benefit nature and humanity" (1989: 13, emphasis in original).

Bookchin advocates the need for change, but suggests that the "change is so fundamental and far reaching that even the concept of revolution and freedom must be expanded beyond all earlier horizons" (1980: 42). He advocates the elimination of all forms of hierarchy, all forms of domination, all social classes and all private property. "The revolution...must encompass not only political institutions and economic relations, but consciousness, life

styles, erotic desires, and [the] interpretation of the meaning of life" (1980: 43). The discourse of social ecology, according to Bookchin, provides the necessary philosophical and ecological orientations to "remake" society along the necessary avenues.

The first step necessary for the successful reformulation of society along ecological lines is the adoption of a new philosophical basis. The social ecology perspective championed by Bookchin opposes the dominant capitalist mentality which he accuses of

reducing reason to a harsh industrial rationalism focused on efficiency rather than a high-minded intellectuality; that it used science to quantify the world and dualize thought and being; that it used technology to exploit nature, including human nature... (1989: 166).

The social ecology perspective of Bookchin includes a plea for a new conceptually clear ecological philosophy "that can serve in the highest ethical sense as a guide for human conduct and provide an awareness of humanity's 'place in nature" (1990: 53). Bookchin proposes a new ecological discourse, including a new ecological philosophy would replace the conventional discourses and their philosophies "which seek to dominate humanity as well as the natural world" (1989: 166). Bookchin suggests a philosophy which abandons the dualisms and reductionist mentality of the current social discourses in favor of a dialectical "organic

reasoning."

According to Bookchin, conventional reason and "mechanical thinking...give rise to splits between body and mind, reality and thought, object and subject, country and town, and, ultimately, society and the individual" (1990: 103). These dichotomies result in a degree of philosophical confusion which can be utilized to rationalize the continued domination of human by human and nature by human. Organic reasoning, according to Bookchin, would eliminate this possibility.

Organic reasoning rejects the "misguided belief that only one kind of reason can exist" (1990: 20). It rejects the "centuries-long glorification of ["conventional"] reason with its icy claims to 'efficiency,' 'objectivity,' and [its'] freedom from ethical constraints" (1990: 9). Organic reasoning embraces a "developmental interpretation of reality" (1990: 24, emphasis in original), as opposed to the stationary interpretations of conventional reason.

Bookchin does not, however, deny the important practical contributions of conventional reasoning. It is a skill, "indispensable when building a bridge or a house" or "in the nuts-and-bolts of dealing with everyday life" (1990: 17). Conventional reasoning is useful for achieving certain ends, but it is useless in attempting to ascertain the moral character of the ends it is so well equipped to accomplish.

Conventional reason, according to Bookchin, is capable of analyzing the economic efficiency of clear cutting a temperate-zone rainforest or relocating a large industrial facility but it is incapable of expanding its focus to include the moral and social significance of these actions. Bookchin argues that organic reasoning is better equipped to handle the moral and social implications of human decision making needs.

Bookchin believes that conventional reason, despite its practical applications, is limited by the principles of identity, causality, and stratification. These principles have obscured humanity's normative understandings of humanity's relationship with nature, the individual's relation to society, and the individual's relations with one another because conventional reasoning provides only very limited and unsustainable goals, usually of a destructive economic nature, without also providing the tools necessary to question the goals. It is, according to Bookchin's interpretation, the incomplete normative conceptualizations of the true relationship between nature and humanity prevalent in modern day thinking that have led to the domination of nature and humanity. In order to eliminate domination, which, according to Bookchin, is necessary for a truly sustainable future, it is necessary to reexamine the underlying principles of conventional reason and explore

alternative reasoning based on an organic, or developmental, interpretation.

According to Bookchin, the principle of identity, as incorporated by conventional reason, imposes severe and detrimental limitations on human comprehension. The principle of identity confines human interpretation of an object or phenomenon to a rigid, concrete classification subject to a particular set of circumstances or a moment of time without examining the possible transitional nature of the object or phenomenon being examined. A child is identified and categorized as a child and nothing more without examining the fact that a child is a transitional phase between phases labeled infancy and adulthood. A caterpillar is identified and categorized as a caterpillar without examining the fact that a caterpillar is a transitional phase between points labeled the larval and mature butterfly stages (1990).

Bookchin also criticizes the notion of causality which is built upon the inadequate principle of identity. The notion of causality, according to Bookchin, is dependent on the ability to define concrete distinctions between different states of being. Bookchin suggests that because it is impossible to make concrete distinctions between childhood, adolescence, and adulthood, it is impossible to discuss causal reasons for the transformation.

Finally, Bookchin suggests that conventional reason also encourages the stratification of history. History is systematically divided into 'periods' and other such time frames in an attempt to create the foundations for the principles of identity and causality. History is not, according to Bookchin, a series of identifiable time periods and should not be perceived as such.

The limitations imposed on conventional rationality by the general acceptance of the principles of identity, causality, and stratification reduce its usefulness. Bookchin believes that society must abandon the philosophical perspectives suggested by the logic of conventional reason in favor of a dialectical, "organic" interpretation. Organic reason rests on an understanding of a "developmental reality" (1990: 20, emphasis in original). A developmental understanding would replace the conventional principle of identity with a principle of transition. Causality would be replaced by an understanding of continuous evolution and the stratification of history periods replaced by a perception of the "flow" of history (1990).

The adoption of an organic perspective would, according to Bookchin, allow members of society to rationally examine many of the normative issues intentionally ignored by conventional reason. An understanding of the transitional

nature of objects and phenomena, of continuous evolution, and the 'flow' of history allow an examination of potential changes and potential improvements in society. Normative issues and questions not addressable by conventional reason can now be objectively addressed. Questions concerning "[w]hether a society is 'good' or 'bad,' moral or immoral, ...can be objectively determined by whether it has fulfilled its potentialities for a rational and moral society" (1990: 35).

Bookchin believes that embracing organic reasoning will allow humanity to reexamine and change key components of the social structure of the community. Dialectical thinking will allow society to erode the constructed dualism between human and nature and realize that humans, and human society, are a natural part of the environment. A suburban neighborhood, with its "carefully manicured suburban lawn[s]" (1990: 8), spacious homes, and paved roadways is just as "natural" as a 500 year-old rainforest. Indeed, according to Bookchin, "everything is 'natural' insofar as it exists...be it a plastic table or wolves on the Alaskan tundra" (1991: xx, emphasis in original). An organic vision will also allow humanity to recognize the unique, symbiotic relationship it maintains with the non-human world and learn that the ability to expand human potential includes self-imposed limitations on the degree of interference in the

non-human world. Reducing non-human potential ultimately leads to the reduction of human potential.

Bookchin also notes that an organic interpretation of reality would reveal the detrimental aspects inherent in any form of domination. Domination would come to be viewed as an intolerable evil that must be eliminated. This may well, according to Bookchin, include the elimination of "the patriarchal family, the multinational corporation, the bureaucratic and centralized political structure, the property system, and the prevailing technocratic rationality" (1980: 78). The elimination of domination would then allow the emergence of a truly sustainable ecotopia "based on mutual aid, decentralized communities, a people's technology, and non-hierarchical, libertarian relations that will yield not only a new harmony between human and human, but between humanity and nature" (1980: 75).

A truly sustainable society, according to Bookchin, does not only require a sustainable supply of natural resources. It also requires a sustainable conception of humanity; a conception which guarantees and protects human freedom. A truly sustainable society requires maintaining human freedom by preventing all forms of domination. Sustainability, according to Bookchin, requires freedom and freedom requires the absence of domination.

SUMMARY AND CRITIQUE

Within the social ecology discourse, Bookchin presents a meta-theoretical explanation for the existence of the non-sustainable aspects of human society. He attempts to link the historical evolution of human domination to the modern domination of nature. The domination of nature emerged, according to Bookchin, from a history of domination which began with the domination of the young by the old, the domination of man by man, the domination of woman by man, the domination of the poor by the wealthy and has concluded with the domination of nature by humanity.

Bookchin suggests that these forms of domination have been incorporated into the very fabric of human civilization. All social relations, including the relations between young and old, men and women, and employee and employer are defined by systems of domination. Bookchin suggests that the effects of domination have eroded the sustainability of human freedom. Individual human freedom is in the process of being reduced from what an individual is capable of doing to what the individual is permitted to do.

The solution to the sustainability crisis, as presented within the social ecology discourse, is to "rebuild" society based upon a sustainable, "organic reasoning." Restructuring society along organic lines will, according to

Bookchin, eliminate the inherent forms of domination which permeate modern society and have led to the sustainability crisis. The elimination of the domination of human by human, it is argued, will, with time, eliminate the domination of nature by humanity.

Unlike the two previously discussed radical sustainability discourses, there is little evidence that any of the unique language of the social ecology discourse has permeated the conventional political, social and economic discourses. There has also been no adoption of any of the solutions presented within the social ecology discourse. This is due, according to Bookchin's interpretation, to the fact that the social ecology perspective does not address specific issues, unlike the other sustainability discourses, but instead chooses to concentrate on the more general problems of modern industrial society.

Bookchin's condemnation of "single-issue environmental groups" and discourses which over-simplify the sustainability crisis may be valid, but his own discourse's interpretation of the sustainability problem suffers a similar fate. In discussing the societal origins of the sustainability crisis, Bookchin presents an overly-simplistic explanation of the solution. The solution presented within the social ecology discourse is to "rebuild society" along ecological, non-hierarchical, sustainable

lines. The discourse contains no reference to the inherent difficulties of destroying and rebuilding the social structure or of the attempt to remove and prevent the reemergence of all forms of domination.

The difficulty in reconstructing society based on the principles provided by organic reasoning begins with an inadequate definition of organic reasoning. Organic reasoning, within the social ecology discourse, is described as opposing conventional conceptions of rationality without ever clearly defining what organic reasoning is. The limited descriptions of organic reasoning that are provided do not include an indication of how it can be used to reconstruct society along non-domineering lines. The definitions and descriptions do not indicate, for example, how the elimination of human domination will eliminate the human domination of nature.

Additional difficulties with the social ecology discourse emerge from its inadequate description of the mechanism of change. It is at least conceivable that domination is inevitable, that its existence predates human societies and that it is indestructible. There is no explanation, within the discourse, concerning the means of destroying the knowledge and power monopolies that have, according to Bookchin, existed since the dawn of civilization. The destruction of all forms of domination,

if possible, is further complicated by the assumption that many forms of domination have been incorporated into social institutions and internalized by members of society. Finding and destroying existing forms of domination while preventing the emergence of new and more pervasive forms is a task that requires more than the adoption of a new form of reasoning. It requires a detailed plan of attack; a plan that is not currently a part of the social ecology discourse.

The possibility thus exists that the reason the conventional discourses have failed to incorporate any specific aspect of the social ecology discourse, other than the language of sustainability, is because much of the discourse is inaccessible outside of the radical context in which it is presented. The social ecology discourse is contextualized within a broader discourse of domination. Until mainstream political, social and environmental discourses adopt a similar perspective, the suggestions presented within the social ecology discourses will remain removed from the conventional discourses. Even if such a situation arises, the radical changes proposed within the social ecology discourse must be clearly defined in order to be determined useful by the mainstream political, social and economic discourses. Clear definitions must include a

detailed description of the means to implement the proposed changes.

Chapter Five
CONCLUSION

"There is nothing more difficult to carry out nor more doubtful of success, nor more dangerous to handle, than to initiate a new order of things. For the reformer has enemies in all who profit by the old order, and only lukewarm defenders in all those who would profit by the new order. The lukewarmness arises partly from the fear of their adversaries who have law in their favor; and partly from the incredulity of [hu]mankind, who do not truly believe in anything new until they have had actual experience of it."

- Machiavelli, The Prince

OVERVIEW

The radical sustainability discourses of Daly, Schumacher and Bookchin have presented alternative explanations of, and solutions to, the environmental crisis than the ones portrayed within conventional political and economic discourses. They have collectively proposed that the origins of the crisis be expanded beyond the limited conventional conceptions of "market flaws" to broader conceptions of a flawed market, a flawed understanding of humanity, or a flawed society. They have proposed radical goals for changing the organization, function and structure of society. (For a summary of the radical sustainability discourses discussed within this thesis, please consult Table 5.1.)

The meta-explanations presented within the radical

TABLE: 5.1

Basic Distinctions Between
Three Radical Sustainability Discourses

Discourse >	Steady State (Daly)	Simple Living (Schumacher)	Social Ecology (Bookchin)
Distinction			
Initial Assumptions	Continuous economic growth is not sustainable	"Essence of humanity" is not sustainable	Human "social freedom" is not sustainable
What Needs Sustaining?	A limited consumer society	The "human experience"	"Social freedom"
Degree of Social Change	Limits on income and wealth, and reduced reproductive autonomy	Reduced consumption, new forms of work, and an emphasis on spiritual growth	Destruction of all forms of domination
Mechanism of Transition	State intervention	Redefinition of work, restructured market, and the adoption of a new lifestyle	Introducing new non-dominating social and political organizations

sustainability discourses have not, according to the radicals, been adequately incorporated into the conventional environmental, political and economic discourses. The linguistic tools of the radical discourses have, however, permeated the conventional discourses. Politicians, mainstream environmentalists, World Bank economists, farmers, Madison Avenue advertising executives, foresters, and even corporate executives have begun utilizing the language of sustainability. Sustainable fishing, sustainable forestry, sustainable agriculture, sustainable resource use, and sustainable waste management have all been presented as solutions to the environmental concerns being raised within the mainstream discourses.

Some have suggested, most notably Bookchin, that this apparent mainstream acceptance of sustainability evidences a "shrewd linguistic parasitism" (1980: 87) designed to coopt the language of the radical sustainability discourses, defuse the radical critiques and incorporate them into the conventional discourses. Bookchin and others fear that the conceptions of sustainability presented within the conventional discourses are simply watered down versions of their original radical critiques. They believe that the conventional version of sustainability, the version that is currently entering mainstream political and economic discourses, has reduced their presentation of the system as

the problem to a less threatening portrayal of the system as the solution to the problem. It is a deliberate attempt, according to Bookchin, to silence the radical critiques by adopting the language and solutions of the critics (1980).

Bookchin may have a valid concern, but this concluding chapter presents several alternative explanations for the phenomenon he describes. It also includes a presentation of the possible future of the broader sustainability discourse, including the role of the radical discourses.

THE ORIGINS OF SELECTIVE INCORPORATION

It is increasingly evident that some aspects of the radical sustainability discourses have been selectively incorporated into the conventional discourses. Specific radical sustainability solutions related to population control, resource extraction quotas, new forms of labor organization, and voluntarily simple lifestyles have been incorporated into the conventional context. Even more important, the language of the radicals--the language of sustainability--is being employed within the mainstream discourses.

If the purpose of radical theory is to challenge conventional societal interpretations of reality and propose alternatives, then it would appear, superficially, at least, that the radical sustainability theorists have achieved some

degree of success. The conventional acceptance of selective aspects of the radical sustainability discourses would indicate that radical theory has contributed to limited changes within the conventional discourses. It is important to realize, however, that the adoption of specific radical solutions and terminology does not necessarily indicate a broader acceptance of the radical sustainability perspective. The radical perspective has not been fully embraced; it has only been selectively incorporated into the conventional discourses.

The existence of selective incorporation raises the possibility, as discussed by Bookchin, that the actors within the conventional discourses are intentionally attempting to "defuse" the radical critiques by "coopting" the solutions and language of the radicals. This possibility suggests that the radical theorists have had very little success altering conventional perspectives.

In order to determine if radical sustainability theory has had, or is capable of having, any effect on the conventional perspectives, it is necessary to determine the reason behind the selective incorporation of the radical sustainability discourses. There are several possible explanations:

- 1) The selective incorporation of the radical discourses is due to the inadequacies inherent within the radical

discourses; or,

2) Selective incorporation is the inevitable result of removing radical solutions from their original context and applying them to problems defined within a conventional context; or,

3) Selective incorporation is, as Bookchin would suggest, the deliberate attempt to coopt the solutions and language of the radicals in order to reduce the effectiveness of the radical critique; or,

4) Selective incorporation is the product of some combination of these three phenomena.

The evidence to support the first of these explanations is found within the critique of the radical sustainability discourses presented earlier in this thesis. The radical sustainability discourses taken as a whole share a tendency to present broadly based theoretical, economic, and sociological explanations for the perceived environmental and social crises of modern society. The radicals also tend to advance very few proposals addressing the means of achieving their recommended solutions. This weakness provides a serious limitation which prevents the radical critiques and solutions from being fully incorporated into the conventional discourses. This tendency was quite evident in the chapters discussing the steady state, simple living and social ecology discourses. It should be evident from the earlier chapters, however, that when the radical

sustainability discourses contain detailed explanations of the means to realize sustainable solutions, the solutions are more likely to be embraced within the conventional discourses. This would suggest the possibility that the reason for the selective incorporation of the radical sustainability discourses is due to a lack of sufficient detail concerning the means of implementing the solutions proposed by the radicals.

Another explanation for the selective incorporation of radical solutions is the possibility that selective incorporation is the inevitable result of removing radical solutions from their original context and applying them to problems defined within a conventional context. Each of the radical sustainability discourses discussed attempts to define sustainability within a slightly different context. The steady state discourse contextualized sustainability within a Malthusian perspective which included assumptions of increasing population growth and a rapidly decreasing resource base. The simple living discourse contextualized sustainability within a conception of an inherently anti-human society and the social ecology discourse contextualized it within a discourse on domination.

The conventional discourses operate within yet another set of contexts; contexts defined by modern society. Any attempt to adopt a radically defined concept like

sustainability without also adopting its radical context will result in a different formulation of the concept. There are many aspects of the radical sustainability discourses that challenge not only the problems of modern industrial society, but the context in which those problems originate. The radicals are suggesting that society must change. They are also suggesting that the context in which society operates must be reevaluated and recreated.

The conventional discourses, operated within the context of modern industrial society, have begun to include acknowledgments of some of the problems the radicals suggest are inherent in modern society. The conventional discourses do not, however, include the possibility that the current structuring of society is the problem. This inability, or unwillingness to perceive society as part of the problem prevents the conventional discourses' adoption of the entire radical perspective. Selective incorporation, however, allows the actors within the conventional discourses to implement solutions originally presented by the radicals which correspond to problems recognized within both the conventional and radical contexts.

A third explanation for the selective incorporation of the radical discourses is Bookchin's explanation. Selective incorporation may be the result of actors within the conventional discourses attempting to "coopt" and "defuse"

the problems, solutions, and language of the radical discourses. This explanation includes the assumption that it is in the best interest of each successful actor in modern industrial society to maintain, at any cost, the present societal structure. Any change in the organization of society may threaten their livelihood. One of the most effective ways of preventing such change and countering any critical attack on the current social structure may be to adopt the language and solutions of the critics.

Adopting the language and solutions of the radicals may be a successful strategy to deflect their criticisms because it allows an actor to shroud their activity in the language of the critics. This might explain, for example, why Phillips Petroleum is now attempting to portray its role as "helping to sustain our future."¹ Phillips Petroleum is part of an industry (oil extraction, processing, and distribution) that is often defined by radicals as an unsustainable activity. If Phillips Petroleum can successfully define their enterprise within the conventional context as a sustainable activity before the radical sustainability critiques are accepted by the mainstream, then the effectiveness of the radicals' charges are

¹ The phrase "helping to sustain our future" has been used as an advertising slogan by Phillips Petroleum. It has appeared in both electronic and print media.

minimized. Sustainability will have been previously defined within the modern societal context by the industry; a definition which excludes, a priori, the criticisms of the radicals. It may be, therefore, in the best interest of "unsustainable" industries to redefine or recontextualize the radical view of sustainability in order to protect themselves from the arguments of the radicals.

The final, and I suggest most likely, explanation for the selective incorporation of the radical sustainability discourses is a combination of the previous three phenomena. There are obviously serious inadequacies within the radical discourses related to the transition to the proposed sustainable solutions which prevent the wholesale adoption of the radical perspective. There are also translation difficulties in the attempt to introduce a radical concept like sustainability into the conventional contexts. These difficulties can prevent the concept from being fully incorporated. Finally, there will always be difficulties introducing and implementing radical changes because, as Machiavelli noted, change will always be opposed by those who benefit from the current system. Each of these three forces act interdependently to limit the incorporation of the radical sustainability discourses into the mainstream political, social and economic discourses.

CONCLUDING REMARKS

It is obvious that the perspectives presented within the radical sustainability discourses have failed to be fully integrated into the conventional discourses. Selective integration, as discussed throughout the thesis, is not necessarily a positive indicator of future acceptance. This possibility might lead one to conclude that the radical sustainability discourses have failed. This is certainly not the case.

The radical sustainability discourses can not be evaluated solely as recipes for the future. The radical sustainability discourses, in addition to presenting conceptualizations of a sustainable future, have functioned, and can continue to function, as a useful analytical tool. The radical sustainability theorists may have failed to generate immediate change, but many of their critiques and criticisms remain valid. They have identified problematic aspects of modern industrial society that are not being adequately addressed within conventional perspectives or within other radical discourses.

The concerns being raised from within the radical sustainability framework rival the concerns that are being raised within the more prominent radical discourses, like Marxism. The radical sustainability discourses are providing an additional critical lens that is being used,

and can continue to be used, to examine the failings of modern industrial society. It is possible, given time and additional refinement, that the critical perspective presented within the radical sustainability discourses will become a critical tool which approaches the magnitude and scope of the Marxian discourses.

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VITA

Michael Scot Case was born in 1969 on a hot and humid August day in Shirley, Massachusetts. He was born the oldest of what would eventually become four children. His family moved to Charlotte, North Carolina where Scot survived thirteen years (K - 12) of Catholic education. He graduated from Charlotte Catholic High School in 1987. He entered Virginia Polytechnic Institute and State University in the fall of the same year intent on studying computer engineering. It did not take him long to realize that engineering, particularly the mathematical aspects, was not his forte. He managed instead to obtain a Bachelor of Arts degree in Political Science with a second major in History and a minor in Economics, graduating in May of 1991. Upon graduation, Scot reenlisted at Virginia Tech and was awarded his Master of Arts degree in Political Science in May of 1993. His immediate future plans include a hiatus from the academic treadmill and a strong determination to "embrace" life.

A handwritten signature in black ink, appearing to read "M. S. Case". The signature is fluid and cursive, with the first letter of each name being capitalized and prominent.